

Manufacturers RECORD

An Exponent of Americanism

ESTABLISHED 1882

BALTIMORE, MAY 30, 1918

YEAR
CENTS

[This day, May 30, has been set apart by President Wilson as a day of fasting and prayer for God's blessing upon Our Country and His guidance in this hour of world tragedy.—EDITOR MANUFACTURERS RECORD.]

A Prayer of Our Nation

Almighty God, Father of Infinite Love, in this hour of world sorrow and of unvoicable woe, we come before Thee in humility, confessing our sins that as individuals and as a nation we wandered far from Thee.

We filled our lives with the husks of worldly pleasure. We sought ease and comfort rather than the path of duty. We asked not that we might know Thy will. We shut our eyes to the horrors of Europe's battlefields; we closed our ears to Thy voice, preferring not to hear the call to succor and to save. We steeled our hearts against the cry of the millions who have died because we came not up to their help.

We saw nearly a million of Thy children in Armenia—a country in which through the centuries millions have clung to their faith in a Risen Christ—mercilessly slaughtered as no other people on earth were ever murdered for faithfulness to Thy cause, and we raised no hand to help them.

In other lands helpless women and the prattling baby with its heaven-lighted eyes were tortured beyond anything men have ever known. But we stopped our ears that we might not hear their agonizing call.

We wrapped around ourselves the smug drapery of pride and peace, and gloried in the thought that we were not our brother's keeper, while with eager hands we grasped the billions of wealth created here through the struggle of civilization to save itself. And now, O Father of Infinite Mercy, as we realize our sin in that we would not see our duty, we come pleading for Thy forgiveness.

We beseech Thee, O God, to strengthen us. Be with us as we now go forth to do Thy work in the struggle to save all that is dear to Thee on earth from destruction by the power of evil enthroned in the hearts of Thine enemies—the enemies of all that is pure and holy in Thy sight.

Arm us, O God, with the power of right.

Let us not boast of our own strength, for vain would be all our efforts except Thou be with us to guide and guard us on land and sea.

Give us as individuals and as a nation deep humility, contrite hearts; a spirit ready to sacrifice upon that cross whereon millions are being crucified for the saving of mankind.

Into our hearts let no thought come that would lessen our realization of dependence upon Thee. Teach us to realize that we are doing Thy work. Grant that our souls may be quickened to the truth that Thou hast called us to this mighty task.

Give us the power to understand the meaning of sacrifice in order to save. As millions of our loved ones shall follow in the footsteps of millions of our Allies, as they followed the example of our Blessed Redeemer who died to save others, may we come into a clearer understanding of the great truth which found expression in Gethsemane and upon the Cross of Calvary.

But not for ourselves alone, O God, would we seek Thy loving kindness and Thy tender mercy.

For years our Allies have suffered and millions have given their lives in this most holy cause. Unto Thee, O merciful, all-wise and all-loving Father, would we plead for them. Strengthen them in this hour of need. Breathe into them the power of Thy Divine Spirit. Comfort the sorrowing. Ease the suffering of the wounded and cause their hearts to be fixed upon Thee. Bless with Divine wisdom and strength of body and mind those who upon the battlefield and in the hospital minister unto the sick.

Give to the dying the joy of Thy presence and a full sense of Thy forgiveness and Thy welcome to Eternal Life.

Unto these nations and to our land give a fuller realization of Thy presence and of Thy Almighty power in guiding them to victory in this, Thy cause.

In Thy boundless mercy cause the light of Thy truth to shine into the hearts of Thy enemies who are our enemies, that they may in sackcloth and ashes seek Thy forgiveness and seek to atone for their awful crimes against Thee and mankind.

Grant, O Father, to unite in a spirit of unselfish devotion and of consecration to this task the people of the allied countries and of our land, battling in this great struggle against atheistic barbarism. May we all thus united go forth joyously and unflinchingly, with unshakable faith in Thee, marching under Thy banner unto victory in Thy Divine plan to lead the world through sacrifice to learn that right is mightier than might, unto that day when through earth's remotest bounds Christ shall rule in every heart as the Prince of Peace Eternal.

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MANUFACTURERS RECORD

DEVOTED TO THE UPBUILDING OF THE NATION THROUGH THE DEVELOPMENT OF
THE SOUTH AND SOUTHWEST AS THE NATION'S GREATEST MATERIAL ASSET

Trade-Name Registered in the U. S. Patent Office

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A PRAYER.

GOD bless our Allies and help them to lick the Germans, and thus save civilization.

CO-OPERATION BY ALL FOR ALL.

WE ask our readers, one and all, to read carefully the exceedingly interesting and unusual letter by Mr. E. A. Darr, published in facsimile on the third editorial page of this issue. Mr. Darr's letter is a tribute to the work of the MANUFACTURERS RECORD for which we can find no words to express our appreciation. But Mr. Darr is not looking for words of appreciation, nor are we looking for words of praise for the work we are trying to do.

All that any of us can do is less than every one of us should do.

The utmost stretch of our power to work is not equal to the needs of the hour.

All that the MANUFACTURERS RECORD can possibly do, by the utmost stretch of thought and work, falls far short of what we are eagerly anxious to do.

All that any reader of the MANUFACTURERS RECORD can do is less than every honest-hearted reader longs to do.

The situation calls for hearty co-operation between every virile force in the nation which can help to arouse the country, and every man brought in touch with that force. We must all work unitedly, and with an utter concentration of soul, mind, body and money upon the one supreme task of quickening into a living flame the patriotism, latent and partly developed, of the entire country, that this nation may be fused into one great mighty fighting machine to save ourselves from eternal damnation.

Mr. Darr's letter expresses the view of himself and some of his associates as one way in which he thinks good can be accomplished. If others felt the same way we shall be glad to have any co-operation which it is in their power to give in extending the circulation of the MANUFACTURERS RECORD in the republishing of anything which appears in its columns, and in talking up everywhere the mighty issues which from time to time are voiced through it by leaders in thought throughout the country who have been able to see and recognize the situation and its dangers.

We are indebted to many readers in all parts of the land for their hearty co-operation in bringing to our attention items of news and facts about pro-German activities, and about other phases of this great world war. Co-operation from every angle must be the work of all of us with all the nation's war-making forces.

Limiting the Nation's Power to Feed and to Fight.

Director-General of Railroads,
Interstate Commerce Building.

Washington, D. C., May 20.

Mr. Richard H. Edmonds,
Editor and General Manager,
Manufacturers Record,
Baltimore, Md.:

Dear Mr. Edmonds—I have your letter May 8 in regard to development of agriculture and industrial resources of the Southeastern and Southwestern States. We have discontinued colonization work by railroads because it had been expanded by competition in many sections beyond legitimate bounds and where it was a question if more harm was not done by it than good. We have also discontinued so-called industrial work of railroads, such as promotion of and competition between railroads for location of new industries, which often result in concessions and rate discriminations which caused dissatisfaction among similar industries already in operation. We believe the best work the agricultural department of railroads can now perform and which will be the best advertising for new settlers is to educate the producer already established along its line, showing him how to produce more per acre, better the quality and better prepare the product for market.

There is no reason why railroads should not also in every reasonable way encourage manufacturing and the development of natural resources. We agree fully with you that it would be best for the country to have manufacturing more generally distributed rather than concentrated to the extent it now is in the eastern section.

Yours very truly

EDWARD CHAMBERS.

To the foregoing letter the following reply was sent:

Baltimore, Md., May 22.

Mr. Edward Chambers,
Railroad Administration,
Interstate Commerce Building,
Washington, D. C.:

Dear Mr. Chambers—Acknowledging receipt of yours of May 20. I am very glad to be assured by you as to the recognition of the Railroad Administration that railroads should encourage manufacturing and the development of natural resources, and also to know that you are in full agreement with the position which I have long taken that the best interests of the country would be served by having manufacturing more generally distributed instead of being concentrated, to the great congestion of railroads, as now is the case in the Eastern section. Nevertheless, at the same time you state that you have discontinued so-called industrial work of railroads, such as promotion of and competition between railroads for location of new industries.

It seems to me that the two positions which you take are diametrically opposed.

On the one hand, you say that the railroad should encourage manufacturing and the development of the natural resources of their territory, and on the other hand, you compel them to discontinue industrial work for the location of new industries.

I cannot reconcile the two positions.

There is a feeling, so I have heard, that it has been considered unwise by the Railroad Administration for the railroads to work for the transference of an industry from one road or one section to another road or another section. But so far as my knowledge goes, the effort to move existing industries from one point to another ended about twenty

years or more ago. For many years railroads and general industrial workers have not considered it wise to undertake to move existing plants to new locations, but have concentrated their work on the building of new plants to utilize the resources of hitherto undeveloped sections or sections which had resources justifying an entirely new enterprise.

A quarter of a century ago there was a vigorous effort to transfer industries from one section to another, but it was soon found that no profitable plant wanted to be transferred, and that the transference of plants which were not making a profit was merely the shipping into a new section of worn-out machinery. All intelligent industrial workers, therefore, abandoned probably twenty years ago any effort to transfer old machinery and old plants to a new section.

The industrial departments of Southern and Southwestern railroads have for twenty years or more worked, with remarkable ability and with very great success, for the investigation of the resources of their territory for particular enterprises, and, having found a good location for some particular enterprise, they then sought to find the capital for that industry. This has resulted in the establishment of many enterprises whose work now helps to supply the things which are needed for the war.

Let me illustrate by a few industries on one road, and similar cases could be reported by the hundred from other roads. The Clinchfield Railroad, cutting across the mountains of East Tennessee and North Carolina, opened up a territory almost bare of industrial activities of any kind. The road cost more than \$100,000 a mile to build, probably the costliest 250-mile road ever constructed in the United States. This heavy cost was due to the mountainous country through which it runs and to the low grade and splendid roadbed. Its managers secured some of the ablest experts in the United States to investigate its geological and agricultural and timber resources. At one point they found a good location for a Portland cement plant. Their industrial department took this data and went to Eastern capitalists who knew the cement industry, and in co-operation with New York capitalists brought about the building of a plant which is now making over 3000 barrels of cement a day. I take it this cement will be used, in part at least, by the Government in the building of concrete ships which are to be constructed at Wilmington. This company is now building a by-product potash plant for the recovery of potash out of the waste gases and dust. It will save over four tons of potash a day and thus help to lessen our dependence in the future upon Germany for potash.

This railroad company also investigated the resources of that section for a dye plant and for general chemical manufacture, and capital was enlisted for the building of a \$3,000,000 plant to produce dyestuffs and chemicals. This, I believe, was the first plant built after the opening of the European war to give promise of saving us from being dependent upon Germany for dyestuffs.

Similar work was done for the building of a pulp mill looking to a supply of raw materials for paper-making, and other industries followed the same vigorous campaign of intelligent effort by the industrial department of that road.

But what the Clinchfield Railroad did was only typical of the splendid work done in the whole South and Southwest by many other lines. The Southern Railway, for instance, for twenty-five years had a splendid industrial department which has been instrumental in bringing about the establishment of many important industries in the South. The At-

Atlantic Coast Line, the Seaboard Air Line, Florida East Coast Line and others have conducted with great success similar work through their industrial and agricultural departments.

The value of this work to the South and to the nation, since the South is the greatest undeveloped asset of the nation, would run far into the hundreds of millions of dollars. Nevertheless, interpreting the action of the Railroad Administration as instructing the discontinuance of industrial work by railroads, the Southern Railway Co. has disbanded its splendid industrial organization and thus given up a work the value of which to the nation can scarcely be estimated.

I need not emphasize, since you already so fully understand the matter, that it is not possible for years to come to relieve the congestion between the Chicago-Pittsburgh and Atlantic Coast districts. That region is overdeveloped industrially, as compared with railroad facilities, and increased rolling stock, without great increase in mileage and terminal facilities, would not change the situation. To permit the country to continue to be dependent upon the East and the Central West for its munitions and all of the vast ramifications connected with war, as well as with peace industries, would be shortsighted and might prove absolutely disastrous to this nation and to civilization. There is no possible way of meeting this except through the development of raw materials in the South and Southwest for the establishment of new industries.

The fate of the nation, and I say it advisedly, may rest upon the decision of the Railroad Administration as to whether or not you propose to compel the railroads to discontinue their work for the development of industrial and agricultural interests in the territory tributary to Southern and Southwestern lines. This work cannot be done by the railroads except through the encouragement of the Railroad Administration carrying the cost of doing it in operating expenses.

I trust, therefore, that you and other members of the Railroad Administration charged with this tremendous responsibility will emphasize to the railroads the last two sentences in your letter, which are as follows:

"There is no reason why railroads should not also in every reasonable way encourage manufacturing and the development of natural resources. We agree fully with you that it would be best for the country to have manufacturing more generally distributed rather than concentrated to the extent it now is in the Eastern section."

I trust that in emphasizing to the railroads the truth that you have thus clearly stated you will recall the decision which you say you have made causing railroads to discontinue their industrial work, which is directly in conflict with the two sentences which I have quoted from your letter, and that you will urge them to push their industrial and agricultural work on a still larger scale.

Very truly yours,

RICHARD H. EDMONDS, Editor.

\$269,000,000 TO BE SPENT BY RAILROADS IN THE SOUTH FOR IMPROVEMENTS.

OF the aggregate of nearly \$938,000,000 which the United States Railroad Administration will allow to the railroads of the country for additions and betterments, equipment and extensions, \$269,212,333 will go to roads in the South. This latter will be divided as follows: Additions and betterments, \$105,592,421; equipment, \$157,448,111; extensions, \$6,171,801, according to the detailed list of allowances to the lines respectively. It is true that in the case of the Baltimore & Ohio Railroad, the Illinois Central Railroad, the Missouri Pacific Railroad, and, perhaps, one or two other systems, part of the allowance will be expended on portions of the roads lying outside of the South, but that total, whatever it may be, will be offset by what will be spent in the South by such roads as the Rock Island, the Burlington, the El Paso & Southwestern, and the Pennsylvania, which cannot be classed as Southern lines, although the latter, for

instance, has considerable mileage and important terminals within the boundaries of the South, especially at and near Baltimore and Washington.

As shown by the foregoing figures, 50 per cent. more will be expended for equipment on Southern roads than for additions and betterments, while the allowance made for extensions is comparatively insignificant. The accompanying list contains the names of 77 companies in the South, yet the total allowed for extensions is less than \$6,200,000, which would average out exceedingly small among them. As a matter of fact, the extension allowance is distributed among 17 lines, the largest amount to any one line being to the Louisville & Nashville Railroad, viz., \$976,035; next, the Gulf, Mobile & Northern, under construction to Jackson, Tenn., \$911,024; the Houston & Texas Central, \$899,866. Fourth in order of diminishing amounts is the Nashville, Chattanooga & St. Louis Railway, \$559,141; then the Chesapeake & Ohio, \$500,631; Baltimore & Ohio, \$450,000, and the Galveston, Harrisburg & San Antonio Railway of the Southern Pacific system, \$426,798, and so on down the list the smallest allowed to any road in the South for extension work being \$15,000, which was to the Missouri Pacific.

The full list of allowances for Southern railroads is as follows:

Alabama & Vicksburg.....	\$650,293
Alabama Great Southern.....	1,962,092
Arkansas & Memphis Railway, Bridge & Terminal Co.	67,500
Atlanta & West Point.....	508,270
Atlanta, Birmingham & Atlantic.....	1,364,896
Atlanta Terminal Co.....	74,000
Atlantic Coast Line.....	10,295,792
Baltimore & Ohio.....	450,000
Baltimore, Chesapeake & Atlantic.....	43,808,303
Carolina, Clinchfield & Ohio.....	39,200
Central of Georgia.....	4,891,225
Charleston Union Station Co.....	3,150,878
Chattanooga Station Co.....	25,000
Chattanooga & St. Louis.....	20,000
Charleston & Western Carolina.....	275,000
Chesapeake & Ohio.....	18,406,721
Cincinnati, New Orleans & Texas Pacific.....	6,035,744
Dallas Terminal & Union Depot Co.....	2,323
Florida East Coast.....	1,741,897
Fort Worth & Denver City Railway.....	704,553
Fort Worth Belt.....	24,000
Galveston, Harrisburg & San Antonio.....	4,095,166
Georgia Railroad Lease Corporation.....	1,062,767
Georgia Southern & Florida.....	57,255
Gulf & Ship Island.....	650,226
Gulf Coast Lines.....	257,308
Gulf, Colorado & Santa Fe.....	2,476,273
Gulf, Mobile & Northern.....	1,908,398
Houston East & West Texas and Houston & Shreveport.....	12,877
Houston & Texas Central.....	1,926,411
Illinois Central.....	26,705,648
International & Great Northern.....	997,467
Kansas City Southern.....	2,231,174
Kansas City Terminal Co.....	1,673,430
Louisiana Western.....	161,137
Louisiana & Arkansas.....	7,898
Louisville & Jeffersonville Bridge & Railroad.....	155,000
Louisville & Nashville.....	12,688,273
Louisville, Henderson & St. Louis.....	388,603
Memphis Union Station Co.....	5,000
Midland Valley.....	220,000
Missouri & North Arkansas.....	82,847
Missouri, Kansas & Texas Railway.....	3,592,825
Missouri, Kansas & Texas Railway of Texas.....	944,253
Missouri, Oklahoma & Gulf.....	61,443
Missouri Pacific.....	9,928,559
Mobile & Ohio.....	752,914
Morgan's Louisiana & Texas Railroad & Steamship Co.....	450,816
Nashville, Chattanooga & St. Louis.....	3,272,546
Natchez & Southern.....	9,842
New Orleans & Northeastern.....	1,003,473
New Orleans Great Northern.....	121,837
Norfolk & Portsmouth Belt Line.....	684,782
Norfolk & Western.....	23,962,224
Norfolk & Southern.....	1,336,324
Pan Handle & Santa Fe.....	501,125
Richmond, Fredericksburg & Potomac.....	1,946,212
St. Joseph & Grand Island.....	335,504
St. Louis-San Francisco Railway.....	7,370,930
St. Louis Southwestern Railway.....	2,031,430
St. Louis Southwestern Railway of Texas.....	644,472
St. Louis Transfer Railway.....	1,750
San Antonio & Aransas Pass.....	88,752
Seaboard Air Line.....	8,710,723
Southern Railway.....	29,113,511
Southern Railway of Mississippi.....	29,631
Tennessee Central.....	80,770
Terminal Railroad Association of St. Louis.....	1,434,337
Texas & New Orleans.....	400,213
Texas & Pacific.....	6,155,411
Trans-Mississippi Terminal Railroad.....	206,934
Union Terminal Railway.....	17,080
Vicksburg, Shreveport & Pacific.....	439,488
Virginian Railway.....	8,631,287
Washington Southern.....	409,882
Western Railway of Alabama.....	312,870
Wichita Valley.....	32,327
Yazoo & Mississippi Valley.....	3,182,997

Total.....\$269,212,333

As the MANUFACTURERS RECORD has pointed out, there has not been enough set aside for the purchase of new cars and engines to compensate for the deterioration of the present equipment. Besides, little has been allowed for extensions, and it cannot but be admitted that the construction of a number of proposed new roads or the completion of extensions already begun would be of great benefit to the railroad system in its entirety. It appears, according to the list covering the whole country, that there was an aggregate of \$1,287,209,146 asked for

the railroads for all purposes mentioned, but that \$349,247,828 of this amount was eliminated, by far the greatest elimination for one road being in the case of the Southern Railway, \$46,916,950 being cut out of its program, although it was allowed \$29,113,511. The Norfolk & Western also had a big sum, \$20,755,200, eliminated from its list, not far from half of what it proposed. Seaboard Air Line had almost \$4,700,000 cut out, and the Atlantic Coast Line more than \$4,800,000. Baltimore & Ohio suffered comparatively little, having eliminated only \$2,454,000 in its total of more than \$46,000,000 proposed. The Clinchfield road was obliged to cut out almost as much as it received, \$4,378,000. Chesapeake & Ohio Railway had to eliminate over \$3,000,000. Illinois Central got a cut of over \$7,000,000. Missouri, Kansas & Texas had \$4,800,000 chopped off its plans, and Mobile & Ohio nearly \$2,800,000, getting only a comparatively small part of what it asked. The San Antonio & Aransas Pass Railway proposed to spend nearly \$4,000,000, which it didn't get, and had to be content with less than \$100,000. The Virginian Railway had over \$13,000,000 shaved from its plans, and so on through the entire list. The Pennsylvania failed to get \$36,000,000 which it wanted, although it was allowed over \$112,000,000 for the system.

Without attempting to criticize the action of the Administration in any particular instance with respect to these eliminations, it must be recognized that this is no time for cheeseparing economy; we want and need all the railroad service which can be provided, and if the authorities in charge of the general transportation situation fail to fully recognize this truth, there will be tangles and congestion with respect to the transportation, not only of war materials, but of those most essential things upon which the life and the industry of the nation depend for its success.

Secretary McAdoo and other Government officials have urged the South to increase its food production, and yet hundreds of acres of foodstuffs rotted in Florida last winter because transportation facilities were not provided. The South is the only section in which increased food production to any large extent can be made available for the nation's welfare, and it is to the South that the country must look for increased coal output and for larger developments in iron and steel and kindred interests, or else we shall tremendously suffer in our ability to make war.

Notwithstanding these facts, the requirements of these railroads of the South were seriously cut, so that it will be impossible for the roads running through the food and coal sections of the South to provide the facilities which are needed. We are compelled to feel that due consideration has not been given to the seriousness of the situation as to Southern roads measured by the needs of the country for increased food and coal output.

THE RAILROADS AND THE FOOD PROBLEM.

RICHARD H. EDMONDS, editor of the MANUFACTURERS RECORD, is a genuine Florida booster. He proclaims in his widely-circulated medium that Florida's fertility and climatic advantages are a national asset, and should be utilized in this time of stress for producing foodstuffs for the nation. If Mr. Edmonds could beat a little of his enthusiasm into the Food Administration and the Railroad Director, Florida might be able to market its foodstuffs for at least enough to pay freight charges.—Palm Beach Post.

The editor of the MANUFACTURERS RECORD has been doing all in his power to press upon the Food Administration and the Railroad Administration the disadvantages under which Florida and other food-producing sections are laboring when, following the Government's call for increased food, they are producing more food than the railroads are able to handle. From this condition there will of necessity come a great reaction and decreased supply of food unless the Railroad Administration gives much more comprehensive facilities than it has yet offered for the handling of foodstuffs, especially of perishable products produced in the South for the feeding of the North and West.

MILITANT PATRIOTISM AGGRESSIVELY AT WORK.



26 S. HANOVER ST.

BALTIMORE,

May 11, 1918.

Dear Sir:--

Will you join me in a movement, by subscribers only, to increase the influence of the Manufacturers Record?

I am not known to you, of course, but you are known to me through a letter of yours published in a recent issue of The Record. Personally, I believe that every subscription or suggestion that somebody buy this paper, is the same as a bullet fired at a German -- and I trust you will understand that I am not connected with the publication in any way and am writing this letter without its knowledge.

The Manufacturers Record is the answer, in my opinion, to the question "What can I do to help win the war?" Educational work is the crying need of the Country to-day, especially in the rural sections. The one way to combat lying, sneaking German propaganda, with its attempts to mislead and undermine the confidence of the American people, is with AMERICAN propaganda, active and aggressive, which tells the TRUTH and which must inspire any man who reads it to take off his coat and get 100% IN EARNEST about winning the war!

So far as my observations go, the Manufacturers Record is doing this to a degree not approached by any other publication. It is putting pep into the war activities of the nation. It deals out praise, where praise is due, with the same relentless impartiality with which it points out weaknesses and demands their correction.

If you feel on this subject as I do, PUSH the Record in every way possible. Buy it at newsstands. Leave it around where people can see it. Get your friends to buy it or subscribe. My friends are getting just as enthusiastic about it as I am. Several of us pitched in and bought a \$240.00 space on the front page of a leading Baltimore paper and reproduced the editorial from the 1st page of the Manufacturers Record of March 14th, which was used as an ad by the First National Bank of Spartanburg (reprint enclosed). The Maryland League for National Defense is having a quarter of a million reprints made (yellow form enclosed) and furnishes them at cost to wholesale houses with their imprint, etc., etc.

In addition to this, so thoroughly are we convinced that we are on the right track that we have pitched in again and sent \$500 to the Manufacturers Record as a deposit to cover 200 six months subscriptions, the names of which will be sent them later. Two of these we want to send to such friends of yours as would be most likely to become enthusiastic and active in furthering a movement of this kind. The others will come from the people whose names appear in the enclosed list and to whom we are writing this same letter.

While I don't know what the circulation of the Record is, a paper so aggressively, so constructively patriotic should count its readers by the millions. It is within the power of its SUBSCRIBERS to give it such a circulation! Let's light in and put the Record across in a BIG way for the effect it will have in hastening the winning of the war.

Yours for aggressive Americanism,

TWO weeks ago the MANUFACTURERS RECORD published a letter from Mr. Edward A. Darr, secretary of Wm. Deiches & Co., Baltimore, in which Mr. Darr enclosed a check for \$500 as a wholly voluntary and unsolicited contribution on our part for a six months' subscription for 200 names to be furnished by him and his associates.

In reply to a letter from the business office asking for further information on the subject, Mr. Darr wrote, enclosing 76 names to which the MANUFACTURERS RECORD was to be sent for six months, and said that the balance of the names would be furnished as soon as received. In the course of his letter he said:

As the plan under which we are securing these names will undoubtedly be of interest to you, I am enclosing copy of a letter sent out by myself and associates under date of May 11.

The names chosen to receive this letter were secured from the various commendatory expressions appearing in recent issues of the MANUFACTURERS RECORD itself. These people are undoubtedly "sold," just as we are sold, on the MANUFACTURERS RECORD's place in helping to win this war and preventing an untimely peace, and, in our opinion, offered the most fertile field for a spontaneous movement to increase the influence of your paper.

Enclosed with our letter of May 11 were a copy of our letter to you (exhibit 1), a complete list of the people receiving this letter (exhibit 2), a reprint of our quarter-page advertisement from the Sun of April 6 (exhibit 3), reprint of leaflet issued by Wm. Deiches & Co., reproducing your front page editorial of March 14 (exhibit 4), and a return postcard with spaces for two names and addresses (exhibit 5).

In regard to the postscript of your letter, for the present, at least, we do not think it will be necessary for you to write each of the new subscribers. We have several letters in preparation to go to them, also to the original list of 100. We appreciate your offer to cooperate, however, and will reciprocate by sending you copies of such other letters as we may get out from time to time in this connection.

The facsimile of Mr. Darr's letter published on this page is, we believe, one of the most unique tributes ever paid by any group of people to the work of any publication, and this letter and the personal one which we have just quoted are given here to show the widespread interest that is being aroused in all parts of the country toward the awakening of our nation to the tremendous issues which we now face. This issue is one of life or death to the country. There is no halfway measure; no middle ground on which to stand.

The complete destruction of Germany's accursed war for world conquest, or the complete destruction of America and its domination by Germany, are the two questions which we face.

One or the other will be the outcome of the war in which we are engaged.

Shall we as a nation be crushed by Germany's barbarism and America go down to ruin? Or shall we with our allies throw into the contest such a tremendous fighting power as to crush the spirit which has raised itself like some giant power of evil, clutching at the throat of civilization?

Death to one or death to the other is certain.

It matters not in what way the people of America who realize this situation seek to arouse the whole country to the mighty problem before us, but every man must do his utmost. There are many great, thrilling, interest-compelling pamphlets issued by various organizations throughout the country with a view to awakening the nation. Some have been published by the MANUFACTURERS RECORD. All should have the widest possible distribution. We have no pride or preference in regard to those that we have published. They are simply offered as a contribution to the nation's life. If other pamphlets present the story more effectively, then we urge

every reader to distribute them as freely as possible. But let every intelligent, thinking man be sure that he carries on a propaganda of intelligent work in distributing the literature of the war which shows Germany's atrocities and the need of work to the utmost extent of our power. If the MANUFACTURERS RECORD is helpful in this campaign, we rejoice in every evidence of the appreciation which Mr. Darr and his associates and other subscribers give of that fact. We do not know the names of those associated with Mr. Darr. We do not know who prompted the movement. All we know is that the group of men interested in the salvation of this country, believing that the widespread circulation of the MANUFACTURERS RECORD will be helpful to the nation, have voluntarily and at their own expense, and without even a word of consultation with us, undertaken to interest others in broadening the circulation of the MANUFACTURERS RECORD.

How many other readers of the MANUFACTURERS RECORD are willing to engage in the same work from the viewpoint expressed by Mr. Darr in his circular letter, which we have printed in facsimile?

It would be needless for us to seek to express our appreciation of this commendation. Indeed, these are not times when people need to say much about appreciation. We do not accept this commendation in any spirit of personal endorsement, but merely as an expression of interest in the nation's welfare which these gentlemen feel can be served to advantage by the wider reading of what the MANUFACTURERS RECORD is publishing.

THE ALLIED CAUSE CHRIST'S CAUSE.

ERNEST TEMPLE HARGROVE, chairman of the war committee, Chapel of the Comforter, New York, in a letter to the MANUFACTURERS RECORD says:

You will, I trust, allow me to express most sincere gratitude for all you have done and are doing on behalf of the Allied Cause, which is so clearly the Cause of Christ.

HAVE YOU JOINED THE RANKS OF THOSE WHO ARE SPREADING THE FACTS?

AS a voluntary act Mr. E. H. Mote of Leesburg, Fla., has subscribed for an extra copy of the MANUFACTURERS RECORD to be sent to a friend. A copy of Mr. Mote's letter notifying his friend of this action has been sent us, and is published herewith.

We greatly appreciate the sentiments expressed, and are gratified by the effort made to secure a new circle of readers for the appeals we are making in behalf of whole-hearted, vigorous, unflinching participation by a united America in the work of winning the war. A constantly growing number of our readers have undertaken to expand the influence of the MANUFACTURERS RECORD by subscribing for friends, just as Mr. Mote has done. Are you among this number? If not, we invite you to join the ranks of those who are helping to spread the facts.

Mr. Mote's letter follows:

Lake County Nursery Co., Leesburg, Fla.,

E. G. Mote, President and General Manager,

Mr. W. W. Holmes,
Wildwood, Fla.:

Dear Sir—The MANUFACTURERS RECORD of Baltimore, Md., the strongest exponent of Americanism on the American Continent, will be sent you six months free, commencing with May 9 issue.

Knowing you as I do, I feel positive that you will see that the editorials of this most valuable publication are read by people who do things in your county. I consider the MANUFACTURERS RECORD the biggest shot that has been fired at Germany.

Thanking you in advance for seeing that the valuable publication is circulated in your community, and assuring you that any subscriptions that you can get for this paper will be highly appreciated by the MANUFACTURERS RECORD, as well as by all true Americans, I am,
Yours sincerely,

E. H. MOTE.

HUNT OUT AND DESTROY PRO-GERMANISM.

COL. F. A. OLDS of Raleigh, N. C., one of the best-informed men in the State in regard to everything which pertains to the history of the past and the industry of the State at present, in a letter to the MANUFACTURERS RECORD gives an interesting account of how the faculty and students of the Asheville High School have set an example for the people of the entire country in pledging themselves that for 10 years they will buy no German-made goods. In this letter Colonel Olds says:

It has remained for the faculty and students of the Asheville High School to set a high mark by pledging themselves to strike Germany a blow by declaring that for ten years they will buy no German goods, and that for every year the war continues they will accordingly extend the time. The Asheville people are now being called upon to sign this pledge, and it is proposed to extend the plan to the country at large.

From another paragraph in Colonel Olds' letter it is evident that the faculty and students of the Asheville High School needed to set an example of patriotism which should stir the entire State and awaken in every corner of that State an unrelenting fight against pro-Germanism, for on this point Colonel Olds says:

The writer was assured by one of the North Carolina State officials that this Commonwealth is just "getting into the war," and this means, he declared, that it will put its whole strength into the movement. Unquestionably German agents have spread their propaganda in a number of rural districts and have found listeners to pass this on. They have tried to incite the negroes against the whites; to induce farm labor to think that this is a "rich man's war," and actually in one county induced some people to say last year that leaders in the United States were paid by Germany to declare war so as to make money! It is equally true that in some rural districts German agents have endeavored to foster desertion and slacking and have fostered antagonism to food conservation and the use of corn for bread. One of the hotbeds of treason has been Wilmington, where, the writer has been assured, there are at least a score of German traitors, some naturalized and some actually born here, but these are all marked men, and the feeling against them is high indeed—so high that the United States District Attorney notified the United States Senate that lynching was more than probable for them unless Congress took action speedily to make the law more gripping.

This is an amazing statement to have to be written of that splendid old commonwealth of North Carolina, vigorous, broadminded and progressive as its people are in many respects. But there have been indications here and there that pro-Germanism has been doing exactly the kind of work outlined by Col. Olds. No one in North Carolina can possibly deny the correctness of these statements, for there is no other man in that State who so thoroughly knows every foot of the State from the coast to the high mountains, and who comes in such close and intimate touch with the people of all classes, in political life, in business life and in all the ramifications of agriculture and work of every character.

But what is true of North Carolina is true of many other sections. Pro-Germanism is still rampant at many points. The same mail which brought us this letter from Colonel Olds brought a letter from another well-informed man, in the course of which he said that he had been impressed with the lack of activity in ship work in some shipyards in the South, in which he was afraid pro-German activity was delaying construction work. Elsewhere today we are publishing a bitter denunciation by an Arkansas judge of the pacifist or pro-German teachings of a minister in that State, whose neighbors were apparently so much in sympathy with his views that the judge could not secure his conviction, although convinced of his guilt.

Once more it is necessary to reiterate and emphasize the statement that it is the duty of every man and woman in this country to hunt with ceaseless activity every pro-German, whether pro-German in thought, in word or deed, and see that every pro-German is eliminated from that community disgraced by his or her presence, and put under the control of the United States Government. Unfortunately, the Government has been entirely too lenient in its dealings with these pro-Germans; but

sooner or later it will be driven home upon the Government itself that leniency will prove a disaster to the country. In the language of Bishop Henderson of Detroit, recently quoted by us, "the time has come to locate, eliminate and exterminate every pro-German."

HIGHWAY CONSTRUCTION ESSENTIAL TO WAR ACTIVITIES.

A. G. RAAB of Seattle, secretary of the Pacific Coast Defense League, "incorporated for the purpose of helping to bring about an adequate system of military highways for the Pacific coast," in a letter to the MANUFACTURERS RECORD, says:

I am very much taken with your thought that there should be a system of national highways constructed with a definite idea of their military value. Therefore, I shall take up this matter with the various highway associations in the United States to see if it is not possible to unite and formulate some bill that may be presented to Congress in the hopes of securing a system of military highways, not only for the Pacific coast, but for the entire country.

That such a system of military highways is absolutely necessary and that the construction cannot be much longer delayed without national disaster can easily be seen by anyone who will study the tremendous growth of motor truck traffic for war purposes as well as for peace work.

Take, for instance, the 40-mile highway between Baltimore and Washington, built for ordinary automobile and motor-truck traffic. In these days, when traveling over this road one scarcely gets out of sight of heavy motor trucks handling to a large extent war material. There is almost a continuous line of these trucks passing back and forth, carrying tonnage far beyond the strength of the roadbed. One year ago this road was regarded as one of the best pieces of highway in the United States. Today it is almost wrecked. It must be completely rebuilt for long stretches, and to that end the State is seeking the aid of the National Government, since the principal destruction of the road was done by Government motor trucks. Some of the roads in the same State that are being used for heavy Government motor transportation are being destroyed in the same way, but if these roads had not been in existence or if they had been the old mud roads of five or six years ago, their use would have been an impossibility for war work.

Under existing conditions railroad transportation must grow worse instead of better; therefore, highways available for the heaviest motor-truck business must be built as rapidly as possible, for in no other way will it be possible for the nation to meet the necessities of the hour in handling a vast traffic which cannot be thrown upon the railroads.

The Government has made a very serious mistake in discouraging the building of highways by counties and States. That was one of the blunders which will cost a great deal in time and money to overcome. Under the conditions which were existing at the beginning of the war, over \$200,000,000 was being annually expended in this country for the building of highways. If those in authority had been wise and had had the vision to see the situation, they would have encouraged every highway improvement that could be pressed to completion. A beggarly sum of \$200,000,000 would have counted nothing in the nation's expenditures as compared with the results, and the amount of labor that would have been employed will be less than that which must be used now that the work must of necessity be taken up afresh and pressed forward vigorously without regard to the question of cost.

It is greatly to be regretted that those in authority having the matter in charge saw only one side of the situation and thought that the money expended on highway improvements and the transportation used for that purpose could be better expended for something else. In this they made a serious mistake which will hamper the operations of the Government for war-making. But while road building was discouraged, while transportation was denied to highway materials, no one has yet heard that transportation was denied to the breweries for coal, for raw materials and for the finished product, and no one has yet heard that transportation was denied to all the vast liquor interests and race-horse business throughout the entire country.

Unwise Action of Railroad Administration in Halting Utilization of Resources of South and Southwest for Nation's Safety in War and Peace.

Central of Georgia Railway Co.,
Industrial Department.

J. M. Mallory, Industrial Agent.

Savannah, Ga., May 14.

Editor MANUFACTURERS RECORD:

Your editorial in issue of May 9 shows a very clear conception and appreciation of the activities and objects of railroad industrial departments.

By beginning with the fundamental assurance that the rates are the same, you can, through attractive advertising or persuasive personal solicitation, convince a passenger that the scenery is more picturesque or historical, or the roadbed or service more comfortable one route than another.

By demonstrating to a shipper or consignee that the time is quicker, or even for personal considerations of the soliciting agent, you may divert his car from one line to another, but no such arguments as these ever opened a mine, built a factory or developed a water-power. Of course, a factory must have railroad service, but first it must have raw materials, fuel, power, markets, labor, schools and other advantages which are peculiar to communities and not to railroads. A few of the trunk lines of the country were built and are supported by the general traffic, but by far the majority of our railroads are due and draw their sustenance from the natural resources and advantages along the line. It is an axiom proven by reference to any map or guide and a fair knowledge of the territory that industries, or undeveloped resources which became industries, make railroads, but railroads without these advantages cannot make successful industries.

Scientific and economic investigations made by railroads have done more to place industries where they belong than is generally known or credited to the railroads. It is true that in some cases, the textile manufacturing, for example, the center of the industry has shifted. Competing districts in iron, steel, oil, cement and other lines have sprung up, but these developments have resulted in benefits to the whole country which no one can successfully assail. We also know there are still industries, like the pottery plants, that are without reason for their present locations except markets, and should be at least divided, as was the textile, iron and cement.

The study and compiling of resources has hardly begun by the railroads, and any candid, competent industrial agent will tell you that his most serious trouble is his ignorance of the territory his line traverses.

The Department of Agriculture found that if they wanted to reach the farmer convincingly and improve his conditions they must have county agents to actually go on his farm, and not depend on bulletins and other generalities, somebody to point out what the "Norfolk Sandy Loam" or the "Congaree Clay" really are and what they are adapted to.

Likewise, the Department of Commerce found that if we ever built up any foreign trade we must have competent agents study the wants and conditions of the foreign customers and stay with them. The railroad industrial departments are supplemental to the Bureau of Commerce, Geological Survey and other Government departments, and are attempting to work out the details which Government agencies do not undertake and which are so necessary to attract capital in development.

The railroad industrial departments will stand the closest scrutiny, both as to expense and accomplishment, and, instead of being discontinued, they should be decidedly enlarged upon some plan suitable to Government operation.

J. M. MALLORY.

The foregoing letter from Mr. J. M. Mallory, industrial agent of the Central of Georgia Railway Co., so completely states the case as to the value of the work of railway industrial and agricultural bureaus that, though it was not intended for publication, we have secured from Mr. Mallory the privilege of publishing it.

It is entirely true, as Mr. Mallory says, that Government agencies cannot undertake officially to investigate all of the resources of any section and then seek to enlist capital for their utilization. Nevertheless, these resources must be hunted out, and capital must be enlisted for their development, or else the power of the nation to hasten the end of the war to a successful termination will be seriously crippled.

It is difficult to imagine how there ever crept into the Railroad Administration any thought of lessening the power of the railroads to work for the agricultural and industrial development of their sections, except it may have come about through an entire misapprehension on the part of someone connected with the work as to the operation of railroad bureaus of industrial and agricultural activity. It is

scarcely conceivable that for the picaresque sum of about \$600,000 expended annually by the railroads of the South and Southwest for industrial and agricultural work there could be developed in the Railroad Administration's mind a thought of saving this sum as an evidence of economy. This would, indeed, be worse than cutting off the nose to lessen the area of the face. It would be worse than saving at the bung hole while knocking out the bottom. For the \$600,000 which the railroads of the South and Southwest have been spending in industrial and agricultural work they have achieved marvelous results for the good of the nation. They have brought about a great increase in livestock, in grading up livestock; in enlarging the area in cultivation of foodstuffs, and in hunting out minerals of one kind and another, and bringing about their utilization for the production of things, without which we could not at present successfully carry on the war. Probably no such results were ever achieved in any other section or by any other expenditure of so small a sum as \$600,000 in the world's history, of such vital importance to a nation as the outcome of this expenditure annually made by the railroads of the South and Southwest.

Wise management would have said to these railroads: "Double the industrial and agricultural activities of your system; bring about enlarged food production; encourage the breeding up of livestock; keep your geologists looking for raw materials and your agents seeking capital for the utilization of these raw materials, in order that the material life of the nation may be rounded out, and the vast resources in soil and in minerals of the South and Southwest be made available to the utmost extent in the great fight of the nation to save itself." But instead of this wise policy, the railroads have been ordered to discontinue this work, and the excuse as given for doing so would indicate that the matter has not been given any close study.

The Government is eagerly asking, in order to save transportation, that mineral resources shall be investigated everywhere with a view to the development at home of many of the minerals which are now imported from other lands. It has been estimated that several hundred thousands of tons of shipping might be saved by producing at home the manganese and other minerals which we are now importing. But while the Government on one hand is thus urging research and development work to secure these minerals, it is, on the other hand, through the Railroad Administration, cutting off the very influences which for years have been successfully doing this work.

It is impossible for the Geological Survey, the Bureau of Mines and the Department of Agriculture to do what the railroad industrial and agricultural bureaus have been doing. They cannot search out the whole country as the experts of these railroads have done; and even if they could do so, the Government could not then go out into the highways and the hedges and into the money markets of the country and specifically bring into the development of these individual enterprises the men and the money needed. That is what the railroads were doing. The Government cannot undertake to go to commercial clubs, to county and State organizations and ask for individual co-operation in all of these activities, both for food production, for breeding up livestock and increasing the supply of livestock, and for hunting out and developing rare minerals which are now imported, in the way in which the railroads could do this.

We can fully understand that under the tremendous pressure of work which has been resting upon the various members of the Railroad Administration, all of these points have probably escaped attention.

The wise man is he, who, having realized his mistake, promptly corrects it. Consistency is the refuge of small minds, and we hope, therefore, that the men connected with the Railroad Administra-

tion are broad enough and big enough to recognize their mistake and not to seek refuge in consistency, but frankly say that they have seen a new light on the subject, and that they will encourage railroads, not only the railroads in the South and the West, but the railroads on the Pacific coast and in every other undeveloped section, to do their utmost to advance the production of foodstuff and the development of industrial interests.

HAVE WE MISINTERPRETED A DIVINE COMMAND?

BECAUSE the Courier-Journal has since the beginning of the European war occasionally illuminated its editorials with its now classic statement "To Hell with the Hapsburgs and Hohenzollerns," the Christian Churchman says: "The profanity of the Courier-Journal is abhorrent."

Perchance if the editor of the Christian Churchman will turn to the twenty-third chapter of Matthew he will find these words spoken by Him who spake as never man spake:

"Ye serpents, ye generation of vipers, how can ye escape the damnation of hell."

Was the Saviour of mankind profane when he made this fearful arraignment of those who in his day on earth were doing infinitely less harm to humanity than the Hohenzollerns and the Hapsburgs whom Colonel Watterston has been consigning to the lower regions?

It has so long been customary for many people to think of Christ almost as a weakling, speaking only soft words, that there has been created the impression that the Lord was without virility and strength or a determined will, and was merely a weak, gentle soul, always thinking only of peace. Instead of this representation of the Christ we should think of Him as one who through His entire ministry was a vigorous champion of the right against wrong, one whose scathing, bitter denunciation of the Pharisees and hypocrites of His day has never been surpassed in human language; one who, with indignant bitterness drove out by physical force those who had profaned the Temple of the living God; one who carried His ceaseless fight for the right against the entrenched power of might of that day until He died upon the cross, preferring death to the peace which He might have had had He sought peace by yielding to the spirit of the age, instead of standing out as a conspicuous, uncompromising fighter against wrong.

Is there anything known to man more vigorous and scathing in its denunciation of the men who represented the power of might and of evil of that day than that fearful burning denunciation of Christ in the twenty-third chapter of Matthew?

When some so-called pacifists, which is but another name for weak-mindedness or pro-Germanism, undertake to claim that we must at all times have a spirit of peace in the heart, a spirit of love for enemies, not personal enemies, mind you, but enemies of God Himself, enemies of the right, turn to the twenty-third chapter of Matthew and read to them the following:

But woe unto you, scribes and Pharisees, hypocrites! for ye shut up the kingdom of heaven against men; for ye neither go in yourselves, neither suffer ye them that are entering to go in.

Woe unto you, scribes and Pharisees, hypocrites! for ye devour widows' houses, and for a pretence make long prayer; therefore ye shall receive the greater damnation.

Woe unto you, scribes and Pharisees, hypocrites! for ye compass sea and land to make one proselyte, and when he is made, ye make him twofold more the child of hell than yourselves.

Woe unto you, ye blind guides, which say, whosoever shall swear by the temple, it is nothing; but whosoever shall swear by the gold of the temple, he is a debtor!

Ye fools and blind; for whether is greater, the gold, or the temple that sanctifieth the gold?

And, whosoever shall swear by the altar, it is nothing; but whosoever sweareth by the gift that is upon it, he is guilty.

Ye fools and blind; for whether is greater, the gift, or the altar that sanctifieth the gift?

Whoso therefore shall swear by the altar, sweareth by it, and by all things thereon.

And whoso shall swear by the temple, sweareth by it, and by him that dwelleth therein.

And he that shall swear by heaven, sweareth by the throne of God, and by him that sitteth thereon.

Woe unto you, scribes and Pharisees, hypocrites! for ye pay tithe of mint and anise and cummin, and have omitted the weightier matters of the law, judgment,

mercy and faith; these ought ye to have done, and not to leave the other undone.

Ye blind guides, which strain at a gnat, and swallow a camel.

Woe unto you, scribes and Pharisees, hypocrites! for ye make clean the outside of the cup and of the platter, but within they are full of extortion and excess.

Thou blind Pharisee, cleanse first that which is within the cup and platter, that the outside of them may be clean also.

Woe unto you, scribes and Pharisees, hypocrites, for ye are like unto whited sepulchers, which indeed appear beautiful outward, but are within full of dead men's bones, and of all uncleanness.

Even so ye also outwardly appear righteous unto men, but within ye are full of hypocrisy and iniquity.

Woe unto you, scribes and Pharisees, hypocrites! because ye build the tombs of the prophets, and garnish the sepulchers of the righteous.

And say, if we had been in the days of our fathers, we would not have been partakers with them in the blood of the prophets.

Wherefore ye be witness unto yourselves, that ye are the children of them which killed the prophets.

Fill ye up then the measure of your fathers.

Ye serpents, ye generation of vipers, how can ye escape the damnation of hell?

It is well in this day, while some men are still teaching false doctrines and trying to convince the public that there should be no bitter denunciation of the fearful crimes committed by Germany, basing their argument on an absolutely false interpretation of some of the teachings of Christ, to refer to this ringing, scathing denunciation, which cannot be matched elsewhere in literature.

It is true that Colonel Watterson's language is vitriolic, but it is not more vitriolic than the case demands; it is true that it is profane, as measured by the ordinary standards of profanity; but on the other hand, has any religious paper in America ever matched the following superb, deeply religious outpouring of a reverent faith which appeared as a Christmas editorial by Colonel Watterson on December 25, 1917?

"Surely the future looks black enough, yet it holds a hope, a single hope. One, and one power only, can arrest the descent and save us. That is the Christian Religion.

"Democracy is but a side issue. The paramount issue, underlying the issue of democracy, is the Religion of Christ and Him Crucified; the bedrock of Civilization; the source and resource of all that is worth having in the world that is, that gives promise in the world to come; not as an abstraction; not as a huddle of sects and factions; but as a mighty force and principle of being. The Word of God, delivered by the gentle Nazarene upon the hillsides of Judea, sanctified by the Cross of Calvary, has survived every assault. It is now arrayed upon land and sea to meet the deadliest of all assaults, Satan turned loose for one last, final struggle.

"The Kaiser boldly threw down the gage of battle—Infidel Germany against the believing world—'Kultur' against Christianity—the Gospel of Hate against the Gospel of Love. Thus is he Satan personified—'Myself and God' merely his way of proclaiming it—for his 'God' is Beelzebub, the Angel of Destruction, his creed the Devil's own, his aim and end a Hell on earth. Never did Crusader lift battle axe in holier war against the Saracen than is waged by our soldiers of the Cross against the German. The issues are indeed identical.

"If the world is to be saved from destruction—physical no less than spiritual destruction—it will be saved alone by the Christian Religion. That eliminated leaves the earth to eternal war. For 50 years Germany has been organizing and laboring to supplant it with 'Kultur,' the genius of Infidelity. Her college professors have been obsessed with it. Her universities have seethed with it. In acclaiming 'Myself and God' the Kaiser has put the Imperial seal upon it. When our armies have run it to its lair—when they have crushed it—naught will have been gained unless the glorious Banner of the Cross is hoisted—even as Moses lifted up the serpent in the wilderness—and the misled masses of Germany are bade to gather about it and beneath it as sadly they collect the debris of their ruin for the reconstruction of the Fatherland."

And Jesus said:

Ye serpents, ye generation of vipers, how can ye escape the damnation of hell?

THE "DAMNING REVELATIONS OF GERMAN'S TURPITUDE."

TELEGRAM.

"Texarkana, Ark., May 24, 1918.

"Manufacturers Record, Baltimore, Md.:

"Send at once 1000 copies Thyssen pamphlet. Mailing check.

"TEXARKANA PIPE WORKS."

The foregoing telegram is typical of the widespread interest aroused throughout the nation by the amazing revelations made by August Thyssen, and now published in pamphlet form by the MANUFACTURERS RECORD. If a better pamphlet showing the turpitude of Germany can be found by our readers, we would strongly urge them to buy them by the thousands and tens of thousands and distribute them. But if no other pamphlet, covering the situation more fully, is available, then we would urge our readers to buy this pamphlet, "Damning Revelations of Germany's Turpitude." We believe that this pamphlet if distributed by the millions of copies in this country would prove of enormous value to the nation and would awaken millions of people, not yet fully aroused to the situation, to the real meaning of this war.

F. L. Fardon of Grand Rapids, Mich., in sending for copies of the pamphlet referred to it as "the pamphlet reproducing the clarion call appearing upon the cover of the MANUFACTURERS RECORD of the 9th, and also the tremendous informative editorial exposing the obliquity of the German industrial leaders who were ready to further any crime to satisfy their rapacity."

F. B. Groves, librarian of the Mechanics' Mercantile Library of San Francisco, in ordering copies of the pamphlet, writes:

"I wish I could afford to place a copy in the hands of every person in the country."

J. E. Norvell, president of the Farmers and Merchants National Bank, Henderson, Tex., in ordering copies, writes:

"I wish every American would read these two editorials of yours. I am sure it would stir every red-blooded one to redouble his activities in support of our country. I have no fears about our boys in the trenches doing their full duty, but we who will remain at home must realize that we have much to do."

Herbert S. Thatcher, secretary and treasurer of the Thatcher Spinning Co., Chattanooga, Tenn., in writing for 100 copies of the pamphlet, said:

"I have read with very great interest your splendid editorial entitled 'The Most Damning Revelation of Germany's Turpitude Ever Published,' in your edition of May 9. The confession of Herr August Thyssen contained in this editorial is most astonishing."

Henry C. Read, wholesale grocer of Fort Smith, Ark., says:

"Please send me 25 pamphlets, 'The Most Damning Revelations of Germany's Turpitude Ever Published,' which I consider the most convincing and convicting expose of the baseness of the German people I have ever read."

These are but typical of letters which are coming from all sections. They indicate the influence that the reading of this amazing revelation has upon those who see it. We believe that every manufacturing concern in this country should buy pamphlets of this kind to a sufficient extent to put one into the hands of every employe, and thus spread broadcast the great story about Germany's turpitude, of Germany's fearful crimes, and of the tremendous issue at stake.

Commenting on these statements as published in the MANUFACTURERS RECORD, the Tampa Times says:

There was never such a barefaced, brazen scheme of plunder and robbery written into history. Attila, the Hun, was a Christian gentleman compared to this German Kaiser. Attila slaughtered his enemies without mercy, but it is not known that he betrayed his friends, if he ever had any. This modern Hun coolly proposed to rob and murder his avowed friends, for the robbery implied murder by wholesale. And he bought the representative men of Germany by promising them a share in the plunder. The heart sickens at the thought that human depravity can reach such depths. Language utterly fails of words to properly characterize such villainy.

Rivers of blood have flowed all over the world, millions of lives have been sacrificed, the world is filled

with mourning, widows and fatherless children are even now starving, and billions of indebtedness to plague future generations have been piled up, while ruin and wreckage of an age-long civilization encumber the paths trod by his bestial hordes; agony and sorrow, indescribable and almost unthinkable, follow in his footsteps, and the world cries "How long, O Lord, how long?" But the day of retribution MUST come, and when the Allied forces enter Berlin as conquerors, the great question will be, What shall be done with the Kaiser? There is no possible punishment to fit the gigantic crimes of which he has been guilty. The world must be made a decent place to live in, and that is not possible while a single one of the Kaiser's hellish brood infests the earth. Away with them, one and all!

If you would read the full revelation of August Thyssen, from which the above account is abbreviated, send to the MANUFACTURERS RECORD, Baltimore, Md., for a copy of the pamphlet containing it in full, together with a soul-stirring editorial by Editor Richard H. Edmonds, which ought to be read by every American. The pamphlet is only five cents a copy.

CHINESE FARMERS AND LABORERS NEEDED.

CONTINUED delay in bringing to this country Chinese laborers for farm work, and possibly for some lines of construction work, will, we believe, be akin to the delay in war preparedness which is now costing the country such a fearful toll in men and money. The decreasing supply of labor in proportion to the work that must be done for the feeding of the nation and our Allies, and for producing the things essential to the winning of the war, brings straight home to every thoughtful man in the country that some new way must be devised to overcome this situation.

We cannot blunder along as foolishly as we did in not preparing for the war without having to pay a fearful penalty for our mistake. It would be feasible to bring to this country a large number of Chinese laborers and farmers under an agreement that they should not supplant American labor by low rates of wages, and that they should be returned to China within a certain length of time after the war.

A proposition to this effect was some months ago made to the Council of National Defense by an organization known as the "Chinese Six Companies." It is quite probable that public men in Washington have hesitated to encourage the incoming of Chinese in this wartime because of their fear of the laboring men of the country and the power and domination of the labor unions. But we can scarcely believe that the laboring men in this country—at least the intelligent ones who understand the meaning of this war—would want to see American women working in the fields to an extent never dreamed of in the past in order to produce the food-stuffs needed, and doing much other heavy and rough work from which they could be saved by the use of Chinese labor. We believe that American laboring men are patriotic in proportion to their intelligence, and, though many of them have been misled in the past by labor agitators, we have faith in the inherent soundness of judgment and of heart of the great majority of American laboring men who have not come under the domination of the German propaganda.

For this reason we believe that if the importance of Chinese labor to the winning of the war should be aggressively pushed upon public attention by President Wilson and other national leaders, the laboring men everywhere would come to see that Chinese workers, instead of supplanting American labor, would supplement its power to strengthen our fighting ability and bring success to American arms. Millions of American laboring people will have to see their sons and other relatives in the great battle for existence, and surely these fathers are not so selfish or unpatriotic as not to want to stand behind their sons to the utmost extent of the nation's power. The power to fight Germany, the power to feed ourselves and the Allies, could be greatly increased by bringing in as rapidly as shipping would permit some hundreds of thousands—and, perchance, a few million—of intelligent, strong, vigorous Chinese farmers and laborers.

General Leonard Wood grows steadily stronger in the hearts of the American people.

A MESSAGE TO THE PRESIDENT AND TO THE CONGRESS OF THE UNITED STATES OF AMERICA.

OUR nation has, we profoundly believe, with clean hands and pure heart engaged in conflict for lofty and unselfish ends.

The attainment of those ends demands all the moral powers of our people, the conservation of our economic resources, and the highest efficiency in service.

These powers are impaired, this efficiency is greatly decreased, and our national vitality diminished by the liquor traffic and all its attendant evils, resulting in the waste of food, the waste of labor, and the waste of life itself.

Having duly recognized this in our army and navy by having taken measures to prevent the use of liquor by our troops, we believe that those who remain and serve at home should willingly apply to themselves the same principles which they apply to our soldiers and sailors, and should submit to the same limitations for the welfare of the nation.

Therefore, in the interest of those who defend our nation, for the saving of our own supplies of food, for the highest efficiency of the industries which provide our means of warfare, and for the strengthening of the moral health of the people, we earnestly urge the President and the Congress of the United States to take steps to prevent, during the entire period of the war, by whatever means are feasible, the manufacture and sale of intoxicating liquor of all kinds for use as a beverage, including the importation of all liquor.

THE NATIONAL SERVICE AND WAR-TIME COMMISSIONS OF THE AMERICAN CHURCHES.

The foregoing petition was signed by the following organizations:

Federal Council of the Churches of Christ in America.

General War-Time Commission of the Churches.

Committee on War-Time Prohibition Memorial.

War Work Committee of the American Christian Convention.

The War Commission of the Northern Baptist Convention.

War Council of the Home Mission Board of the Southern Baptist Convention.

The National Service Commission of the Congregational Churches.

War Emergency Committee for the Disciples of Christ.

The Commission on National Service of the Evangelical Association.

The Permanent Committee on Temperance of the Evangelical Lutheran Churches of the U. S. A. (General Synod.)

War Welfare Commission of the Evangelical Synod of North America.

National War Council of the Methodist Episcopal Church.

War-Time Commission of the Methodist Episcopal Church South.

The War Commission of the Methodist Protestant Church.

General War Work Council of the Presbyterian Church in United States.

The Executive Committee of the National Service Commission of the Presbyterian Church, U. S. A.

Executive Committee of the War Service Commission of the Reformed Church in America.

National Service Commission of the Reformed Church in the United States.

War Commission of the Episcopal Church.

War Commission of the United Brethren.

War Service Commission of the United Evangelical Church.

National Service Commission of the United Presbyterian Church.

War Work Council of the Unitarian Churches.

National Sunday-School War Council.

War Board of the Salvation Army.

Interdenominational Young People's Commission.

The International Committee of the Young Men's Christian Associations.

War Work Council of the National Board of the

Young Women's Christian Associations of the United States of America.

This petition is a clear statement which demands the serious consideration of President Wilson. Our ability to produce foodstuffs, to build ships, to mine coal, to make iron and steel, our ability to live and to wage war are all tremendously handicapped by the accursed liquor traffic of the country. We are wasting over \$2,000,000,000 a year for strong drink, but the actual money thus wasted is of trifling importance as compared with the waste of human energy and the loss of immortal souls.

Every saloon is a hotbed of crime and vice, and a large proportion of the saloon interests of the country is dominated by Germans. The brewery interest is largely of German or pro-German ownership, and the whole liquor traffic is a curse to the nation of such vast extent that it is difficult to measure it, either from the economic standpoint or that of the moral welfare of the country.

How much longer will the nation permit itself to be forced to drag the rotting corpse of this accursed liquor traffic to which it has been chained?

How much longer will President Wilson and those associated with him permit the liquor interests an unlimited supply of transportation and of fuel in order to curse the country with drunkenness, with inefficiency, with crime and immorality of all kinds?

How much longer will President Wilson and those associated with him in the administration of this Government chain our fighting power to the liquor traffic and make our army and navy drag the fearful burden of all the wide ramifications of the liquor business, as they enter into the great struggle for our nation's life?

How much longer will President Wilson and those associated with him in the administration of this Government permit the racetrack gambling element and all the race horse business abundant transportation to all parts of the country, while the nation suffers for transportation to carry foodstuffs and fuel, while our soldiers are giving their lives for civilization's existence?

The time has come for plain speaking on the part of the people of America for a straight-out fight against the greatest handicap which America carries in the war, and that is the handicap of the wide ramifications and the pro-Germanism of the liquor traffic and the saloons which disgrace the nation with their presence.

It is in the power of President Wilson to bring about a complete change in this whole situation, and to put into effect measures which will save our country from this fearful curse.

The civilization of the world, the life of our soldiers, our ability to win this war—all call in thunder tones and ask, How long, O Lord, how long shall we wait for an answer?

STICK TO PROPER SPELLING.

REFERRING to the blocking of the harbors of Ostend and Zeebrugge, a dispatch says the U-boats have been dammed. Query: Why spell it that way?

HIGHWAY IMPROVEMENT NOW RECEIVING GOVERNMENT RECOGNITION.

THERE are intimations that the Government is now so deeply impressed with the necessity of crowding highway improvements as an essential part of war work that greater facilities will be given from now on to the handling of highway materials. Mr. H. G. Shirley, secretary of the Highway Industries Association, writing under date of May 24 to the MANUFACTURERS RECORD, says:

"We are enclosing herewith copy of the order of the Railroad Board governing the supply of cars for shipment of road materials and providing for a committee to handle the entire road question.

"The co-ordination of all the departments interested in roads and the shipment of road materials is in line with the purport of the resolution prepared by this association and passed by the meeting on highway transportation of the Chamber of Commerce of the United States at Chicago, April 11, 1918.

"We believe that when this committee has organized it will approve of proceeding with quite a large amount of road work."

The order of the Railroad Board issued by the Car Service Section applying to highway building materials is as follows:

CAR SUPPLY FOR STONE, SAND AND GRAVEL.

The following rules are promulgated for the guidance of all carriers in distributing open-top equipment:

1. Open-top cars, suitable for such traffic, should be furnished preferentially for the transportation of coal, coke and ore.

2. Available open-top cars, not suitable for the transportation of coal, coke or ore, may be furnished for the transportation of stone, sand and gravel, and when so furnished shall be used preferentially for highway maintenance materials.

3. Open-top cars, suitable for the transportation of coal, coke and ore, and available on coal, coke or ore-producing roads in excess of the demand for such commodities, may be furnished for the transportation of stone, sand and gravel, and when so furnished shall be used preferentially for highway maintenance materials. The return movement to mines or ovens should be utilized wherever practicable in furnishing car supply for stone, sand and gravel. Every endeavor should be made, consistent with keeping up the production of coal, coke and ore, to furnish shippers of stone, sand and gravel with a minimum of 40 per cent. of their normal weekly transportation requirements.

4. Roads which are not producers of coal, coke or ore must not use foreign open-top equipment for stone, sand or gravel shipments, except for one load in the course of the return movement to mines or ovens.

5. Where the transportation needs of essential road construction or maintenance projects cannot be met by car supply furnished in accordance with the above rules, the State, county or municipal officials in charge of the work should, through their proper State Highway Department, apply to the Director of the Bureau of Public Roads, United States Department of Agriculture, Washington, D. C., for assistance. Such applications will be considered by representatives of the Department of Agriculture, the War Department, the War Industries Board, the Fuel Administration and the Railroad Administration, and in accordance with the recommendations of such representatives the Car Service Section will endeavor to furnish car supply necessary for approved essential road construction or maintenance.

It must be understood that car supply for stone, sand and gravel must not be permitted to jeopardize the essential production of coal, coke or ore. If at any time such a result is apparent on individual roads, or generally, orders will immediately issue to curtail the car supply for stone, sand and gravel.

CAR SERVICE SECTION.

In pamphlet form available for distribution

The Most Damning Revelation of Germany's Turpitude Ever Published

Turpitude — Century Dictionary Definition: Inherent Baseness or Vileness; Shameful Wickedness; Depravity

A Confession from a Partner in a Nation's Crime

August Thyssen, a leading steel manufacturer of Germany, discloses the details of a plan for world domination, entered into in 1912, between the Kaiser and the business men of Germany.

(Reprinted from Manufacturers Record May 9, 1918)

5 cents per copy

25 or more at 4 cents per copy

500 or more in bulk at 3 cents per copy

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HOW THE SOUTH FEEDS THE NATION.

ACCORDING to the report of the United States Department of Agriculture, the total production of early cabbage in the United States, based on May 1st condition, will be 142,660 tons, of which 121,000 tons will be in the South, the only other producing State being California with 21,500 tons.

The output in the Southern States shows an increase of about 50,000 tons, while California's production shows a probable decrease of 5000 tons. South Carolina jumped its output from 9450 tons last year to 28,000 tons this year. Florida makes the amazing growth from 11,400 tons last year to 41,000 tons this year, while Alabama jumped from 2000 tons to over 10,000 tons, and Mississippi from 6000 tons to 12,480 tons.

There is a heavy decrease in Texas, which doubled its acreage but cut its production in half by reason of the long drouth in the cabbage-growing section of that State. Virginia also shows a decrease of 5300 tons, while the total increase in North Carolina, South Carolina, Florida, Alabama and Mississippi is 64,840 tons.

Up to May 18 3783 carloads of cabbages had been shipped as compared with 1609 cars for the same time last year. The movement in South Carolina started by March 15, and up to May 19 1714 cars had been forwarded.

This contribution of 120,000 tons, or more than 6000 carloads, of cabbage from the Central South for the feeding of the North and West is but one illustration of how the South is helping to feed other sections, but for which it never receives adequate credit from the National Government nor from the country at large.

An important sidelight on the situation is given in a letter from Mobile, in which our correspondent says:

Truck growers in the vicinity of Mobile have lost thousands of dollars on this spring's crop. Because of the fact that the farmers heeded the urgent request of the national Food Administration, unusually heavy plantings were made. The seasons were favorable, and the crop came only to find a stagnant market.

In order to help these farmers as much as possible the Quartermaster-General's Department at Washington urged cantonments within reach of Mobile to buy cabbage. The price made to army cantonments was \$1 per crate. The first carload of Mobile cabbage ever sent to an army cantonment direct from the field went forward May 23. Camp McClellan, at Anniston, Ala., was the buyer. Inquiries have been received from Camps Wheeler, Forrest and Greene. Others are expected.

Unfortunately, the entry of the cantonments into the market of the Mobile growers will not prevent heavy losses. It took some time to induce the Government to come to the aid of these growers. In the meantime, cabbages wasted in the field.

Growers of this section have to invest about \$100 per acre to raise cabbage, according to information received from most experienced producers. Crates of cabbage have been sold as low as 45 cents. It costs that much to crate and pack them, so no profit is possible from the original investment. Very little money is made by selling cabbage at \$2 per crate, they say.

Prices of Irish potatoes, another crop coming in now and heavily planted in this section, somewhat improved last week, but they are still too low for profit. Snap beans are also finding a congested market.

Because of the expense connected with truck growing, it is said that farmers in many instances face bankruptcy as a result of the poor market found on about every crop grown this spring and early summer.

AN EXAMPLE IN PUBLICITY WORK THE SOUTH MIGHT PROFITABLY FOLLOW.

"MANUFACTURING Opportunities in the State of Washington" is the title of an interesting book issued by the Bureau of Statistics and Immigration of the Department of State, Olympia, Wash. It is written by Harry F. Giles, deputy commissioner, the Secretary of State, I. M. Howell, being ex-officio the commissioner of the bureau. Mr. Howell says in a letter that this publication represents the results of much research and a careful survey of Washington's industries, and that anyone desiring a copy may receive it free by addressing the bureau at Olympia.

The bountiful resources, natural and otherwise, of the State of Washington are graphically described and copiously illustrated. The products of the soil, the forests and the mines are entertainingly and

instructively treated. The divers manufacturing industries are also described, particularly shipbuilding. Cement manufacture, lumber mills, coal plants, etc., all receive attention and impress the reader with the magnitude of all lines of business in this northernmost State of the Pacific coast.

The authorities of Southern States might well study this book as an example of how the story of their own industries and resources could be advantageously presented to the public in compact and readable form for the stimulation of interest and encouragement of immigration to the South.

MEN AVAILABLE TO GUARD THE TEXAS-MEXICO BORDER LINE.

MR. J. R. SCOTT, Montgomery, Ala., in a letter to the MANUFACTURERS RECORD in regard to the situation which necessitates the guarding of the Mexican border line, makes the following interesting statements and suggestions:

Montgomery, Ala., May 23, 1918.

Editor Manufacturers Record:

If I may presume at this time to take up a little of your valuable time, I would like to speak of the situation on the Mexican border.

I will say that I am perhaps as familiar with the entire Mexican situation as most people, for the reason that I followed my profession in Mexico for a number of years, speak the Spanish language fairly well, now own considerable property in the immediate vicinity of Torreon, Mexico, and am in close touch, by correspondence, with many who are able to give me the truth in regard to the situation there.

Without using names, I will say that the situation is about as deplorable as it is possible to imagine. I fully believe that unless active steps are taken to prevent, we will have serious difficulty and actual warfare on the border.

In this connection I believe it would be entirely feasible to get together quite a number of men competent to lead, by reason of their having in the past been leaders among men, but past the age acceptable to the army, who could far better guard our Mexican frontier than to be idle at various points throughout the interior, or than to be at occupations not pertinent to the rapid ending of the many difficulties now besetting our Government.

I firmly believe that 100,000 such men could be enlisted in this cause in 90 days. Men not subject to draft, but who, by reason of their knowledge of conditions on the frontier and their knowledge of the Spanish language, would possibly be more efficient in handling the situation on the border than the regular troops. Then, again, by reason of their more mature years, it is reasonable to suppose that they would be safer on the border than younger men and less liable to bring about unnecessary complications.

I do not wish to put myself forward unnecessarily in this connection, but will say that I would willingly volunteer in such service.

J. R. SCOTT.

We are quite sure that there are many other men who would be glad to adopt the suggestion made by Mr. Scott. Indeed, we have received letters from several men who would admirably fit into the work of this kind, and who, by reason of their long experience in outdoor life in Texas and Mexico and elsewhere, would have a knowledge of the country and of the people of Mexico which would make their services invaluable to the nation.

We commend to the attention of the Administration this most excellent suggestion of Mr. Scott's, which is in line with other letters which we have received from men anxious to serve the nation, but who have passed the line the Government is willing to consider for men to go over to the trenches in France.

DEHYDRATING FOODS.

THE Conservation Food Manufacturing Co. of Atlanta proposes to establish a dehydrating plant for the purpose of dehydrating fruits and vegetables grown in the region tributary to Atlanta, which would otherwise be wasted.

The dehydration of fruits and vegetables is beginning to attract widespread attention. The process opens what appears to be an almost limitless field for good in the saving of crops. At various points in the South and elsewhere in the country other dehydrating processes are being put into effect or plans are being made for them.

A BIT OF PERSONAL EXPERIENCE IN ESCAPING FROM A HUN PRISON.

LEUT. PAT O'BRIEN, that intrepid American who, as he said, "declared war on Germany" the day it murdered the Lusitania, and then enlisted in the British Royal Flying Corps, in delivering his soul-gripping and intensely interesting lecture, "My Escape From a German Prison Camp," in Baltimore last week, said:

"I do not know how long after this war ends your soul may be full of hatred against the Hun, but that as far as I am concerned, I will until my dying day hate the Hun, as I do tonight, with a consuming hatred and contempt." And in referring to the oft-discussed question as to whether the whole German people, or only the military people and the Junkers as a class, are fighting the world, he said:

"The contention or claim that only the military class and the Junkers and what they represent are fighting civilization is all bosh. The entire German nation, every man, woman and child composing it, is in the war, and our efforts must be directed towards smashing the 'whole shooting-match.'"

Pat O'Brien tells a marvelous story of his escape from Germany, which began on a dark night when he jumped through the window of a speeding express train in Germany, until he landed in Holland, covering 250 miles and taking 72 days, traveling by night and hiding by day, living on raw vegetables from the fields; severely wounded when captured, and further injured when he jumped from the train; without medical attention; swimming rivers, some of which were one-half mile wide. In all these harassing trials he showed the courage, stamina and valor that typifies the American soldier and his allied comrades in arms. In speaking about the Hun as he does (and when he speaks of the Germans he always calls them Huns), he speaks from the book and from intimate knowledge of their deviltry, cruelty and barbarous actions, and what he says about the Hun, as quoted above, is a condition that the American people must unanimously recognize and act upon.

TOO MUCH VAIN BRAGGING.

IN a letter to the New York Sun, W. S. Rainsford vigorously criticises some of the bombastic statements which are thrown on the screen in the moving-picture shows and refers to the worst sin against all good taste which came at the close of a recent act in which our army and its commanding officer, though not yet put to the final test in the great battle, were enthusiastically lauded, under the heading, "Victorious Pershing." In the audience there were many men who had been in the actual warfare from England, France and Canadian official life. Mr. Rainsford protests against such lack of taste and boasting when we have not yet done the things for which to boast. And he adds:

We are not a nation of braggarts and ends, and there is an element in these films which grossly misrepresents the best and finest spirit in the American people and in the American army.

Mr. Rainsford is entirely correct in his vigorous criticism of this lack of taste, but we are sorry to say that we are a nation of braggarts. We are constantly bragging and boasting of the things which we have not yet done. We bragged vaingloriously and flamboyantly of the tens of thousands of aeroplanes that we were to send to France "to put out the eyes of the German army." The wildest press agent of a circus could hardly have surpassed in vainglorious boasting what we officially announced to the world about our aeroplane work and other branches of the service. Was it because the American people, in the language of Barnum the circus man, like to be humbugged? The nation as a whole swallowed these wild tales, but is now learning by sad reality that the facts did not begin to support the bragging.

The time is coming, and is not far ahead, when perchance this nation will do some serious thinking. When the Iron of agony enters into the soul of millions of American men and women, perchance we will think, and think deeply, but now we are merely living in the clouds, playing at heroics and patting ourselves on the back for achievements which have not yet come to pass.

SOCIALISTIC-BOLSHEVISTIC TENDENCIES OF NATIONAL OWNERSHIP SHOULD BE COMBATED.

SOME years ago the MANUFACTURERS RECORD expressed the thought that if the Interstate Commerce Commission had in mind to definitely break down the railroad systems of the country in order that they might be bought in cheaply by the Government, it could not pursue a better policy from that viewpoint than the course it was taking.

For many years the Interstate Commerce Commission listened to the voice of hatred against railroads and disregarded the actual facts which are now in evidence to the public and which far-seeing men could easily have understood ten years ago. We do not know whether the Interstate Commerce Commission has been looking forward to Government ownership or not, but certainly its work has resulted in so breaking down the railroad systems of the country that there was no hope for the situation except through the Government coming to the rescue of roads which had been starved unto the point of death itself.

We have been told that a member of the Interstate Commerce Commission, in a recent discussion of the subject, emphatically stated that the roads would never again be allowed to return to private ownership. Whether this member was speaking for all members of the Commission or only expressing his own individual desires or not we cannot undertake to say. But everything indicates that there is a pronounced movement in Washington looking to the ultimate absorption by the Government of the railroads of the country. We would regard the consummation of this as a tremendous disaster to the welfare of the country. Government ownership of our railroads would to a large extent paralyze initiative, halt the development of many sections and give to the Government a mastery over the entire business life of the nation which every thoughtful man would of necessity realize would be fraught with great danger.

Director-General McAdoo has already demonstrated in the advance to be made in freight and passenger rates that there was no hope for the railroad systems except by a tremendous increase in their earning power. The Interstate Commerce Commission for years had taken the opposite position.

While the security-holders of the railroads are deeply interested in the outcome of this situation, their concern, great as it is, is not one-half so important as is the whole question of Government ownership and its effect on national life.

Unfortunately, there is being developed in our country a rank Socialistic-Bolshevistic tendency. We have at work here exactly the same forces which have destroyed Russia. Russia was a country of many men of great ability, but, though they saw the danger, they could not save their nation from ruin under the sweep of the Bolshevistic-Socialistic tendencies of the day, which had been largely nurtured in America and transferred from America to Russia. Many of the leaders in the Bolshevik movement in Russia had for years been Socialistic agitators in New York.

The same spirit is abroad in this land. It is found in high places as well as in low. It is in evidence where one might least expect it, and the nation should be warned that we may be prepared to meet the issue.

Idealistic Socialism, beautiful in theory, advanced by some who live in idealistic clouds, is the parent of the rank anarchistic Socialism which endangers our country to a greater extent than any man in Russia could possibly have imagined that it endangered Russia two years ago.

The railroad situation carries a tremendous power for evil in this respect. Unless the tendency toward national railroad ownership can be halted and definite assurance be given that the railroads will be turned back to private ownership, the whole nation may well look with alarm to the future of the country from the destructive power of Socialism, which might be as great a menace to us as the mighty struggle in which we are engaged against Germany. We may also rest assured that Germany will carry on its propaganda of Socialism in this country, as it did in Russia, for the express purpose of breaking

down the morale of the American people and bringing chaos here as it brought chaos in Russia.

It is time for the people of this country to be doing some serious thinking.

A MESSAGE.

FROM THE WORKMEN AT U. S. N. P. No. 2, MUSCLE SHOALS, ALA., TO THEIR FELLOW SOLDIERS IN FRANCE AND FLANDERS WITH GEN. PERSHING, MAY 25, 1918.

You hold 'em, Buddy boy! We're with you heart and hand in this yere scrap to save the world and freedom in our land.
We know just what you're up against, 'way out there in France,
But hold 'em, hold 'em, Buddy boy, till you git your final chance.
We've all chipped in our bit of cash this glorious Red Cross day
To help you git what's yours by right, if you're hurt while you're away.
We're hustlin' here both day an' night an' Sundays, too, you bet,
To git this plant again—an' we'll do it, don't you fret!
The hammer's rattlin' on the steel as the rivets are headed tight
Is our machine-gun volley in defense of human right.
Each nail we drive, each concrete mix an' all
The rest of what we do is our answer to the call.
We're comin' strong, you Buddy boy, we're comin' right as well;
We're fixin' here to send you stuff to give the Germans Hell!
It won't be long now, Buddy boy, till you will hear from us,
We are workin' quiet-like an' calm with mighty little fuss.
But hold 'em, Buddy, hold 'em, till our work here is done,
An' you'll git a chance to do right smart agin the beastly Hun.
For what this plant will send across to the Flanders battle line
Is what you need to finish up the dirty German swine.
"Ammonium Nitrate" is its name—an' it's all of that an' some—
An' it's exactly what you need to put the Kaiser on the bum.
So hold 'em, Buddy boy! We're with you heart an' hand in this yere scrap to save the world and Freedom in our land!

—CAPT. STEPHEN L. COLES, Ord. R. C.,
Inspector of Construction, U. S. N. P. No. 2.

"WE MUST LICK THE KAISER OR LICK HIS BOOTS."

THIS is the striking way in which the Matthew-Addy Company of Cincinnati states the case in its weekly circular-letter. In discussing the iron trade situation and the difficulties which face all manufacturing concerns, the Matthew-Addy Company reminds us that great as are our business troubles they are as nothing compared to the troubles which our Allies have had to endure, and on this says:

A large founder in Southern Ohio was telling us the other day that he had been in business for 40 years, and that if all the troubles and annoyances he had had in that period were put in a balance with the troubles and annoyances of the past 12 months in the other side of the balance, the latter would be the heavier. We do not doubt the statement. There never was a time in the history of the country when we faced such a great state of affairs as now.

We must either lick the Kaiser or lick his boots.
We must win the war, for if we do not the pieces left won't be worth saving.

We are facing a gigantic conspiracy which, if successful, would mean America for the Germans. And no wonder that business has its troubles. Compared with the troubles of our Allies, we are having an easy time.

EATING CROW.

GOVERNMENT control of railroads has quickly demonstrated that the fight against higher rates was based on a false foundation.

All the muckrakers in the land and all the political quacks who fought railroads will now be forced to eat crow. The time will come when they will also have to eat crow for their denunciation of all big business.

CALL IT A "WAR OF HELL AGAINST HEAVEN."

THERE have been many queries asking as to what this war should be called. Why not call it "The War of Hell Against Heaven," and let it go down into history that way?

A JUDGE WHO KNOWS HOW TO MAKE WORDS BURN AND BLISTER.

CIRCUIT JUDGE W. J. DRIVER of Paragould, Ark., knows how to denounce a pacifist in a way worthy of emulation. We envy him his power to express his sentiments on the subject.

A so-called minister of the Gospel had been haled before the judge for alleged seditious utterances and for efforts to prevent men from enlisting. The judge felt that the minister was guilty, but that he was not convicted because his neighbors seemed to be of the same mind as the preacher, and so when the latter had been dismissed by the jury Judge Driver from the bench said:

I am surprised and humiliated and deeply pained to find that the sacred altars of religion are being used for the preaching of such a contemptible and viperous form of reasoning. In Mississippi county, and in all of the other counties of northeast Arkansas, I have found that these men of God have been ready and constantly ready to respond to every call made upon their time and their means when such calls are for patriotic or moral purposes. They have asked me repeatedly and with great emphasis to use more time than had been allotted me in speeches for the Red Cross, the Y. M. C. A. and for kindred organizations, the influence of which blend into the common-cause war. Therefore, when I hear that in Greene county, in a detached portion of this community, a man who should be a leader and whose work should be an inspiration to others; when I find that this degraded, misguided, villainous viper, this scapegrace and reprobate who now stands before me has been using the pulpit as a means of inciting opposition to the direct mandates of the Government, under which he has lived and under which his relatives live and enjoy the liberties and blessings of democracy; when I am told that a community will permit the spreading of this gangrenous doctrine; when I am convinced that this man has been pointing the finger of criticism at the White House, and has failed to lend his whole-hearted support to the Red Cross and the angels of mercy who are today pressing cold cloths against the feverish lips of wounded American soldiers on the battlefronts of France; when I find that this man's influence has been directed in channels that give aid and comfort to the enemy and if repeated in Berlin would cause a smile of satisfaction to play upon the lips of Von Hindenburg and the demoniacal Hohenzollerns; when these things are brought to my attention and I realize that the holy principles for which we are fighting are being shredded and ground into the dust by this hair-brained defendant and his kind; when I realize that these things are true, I feel an almost irresistible desire to call down the wrath of God upon his head or to inquire why a supposedly decent and law-abiding community has permitted his poisonous footprints to desecrate even the sands of the highways.

This man is discharged because of the apparent effort of his neighbors and his friends to shield him in his traitorous and treasonable attitude. I wish it were within my power to impose sentence to fit the crime. But since this power is not within my hands, I want him taken from my sight as quickly as possible. Have him leave the courtroom. Get him away with the least possible delay. Mr. Sheriff, I command you to clear this courthouse of his presence and to do it at once.

SOME INTERMENTS INSTEAD OF INTERNMENTS NEEDED.

A DISPATCH from New York announces that the Government has interned Dr. August Richter, who located in this country nine years ago and took out first citizenship papers in 1915, thus swearing allegiance to America and forswearing allegiance to Germany, because Dr. Richter testified that he belonged to the German Army Reservists and would keep his oath and would fight with Germany against this country if Germany should invade the United States.

Here is a man of prominence who admits that his oath as an American citizen was the oath of a perjurer; who admits that though an American citizen to the extent of having taken out his first citizenship papers, he belongs to the German Army Reservists, and would regard his oath to the German army as superior to his oath of citizenship to America.

Does not such a condition come very near to treason? Is the simple internment of such a man for the period of the war as an alien enemy sufficient punishment? These men do not care for a few years of imprisonment. That would be held by them as something to their credit in the eyes of Germany. But it would be very different with them if they were condemned to be shot as traitors or to be imprisoned for life as perjurers.

The Government has recently urged that the nation should beware of the danger of the mob spirit vent-

ing itself in the death of pro-Germans; but if the Government will not act with vigor in such cases its failure to do so will only stir to deeper depths the rising hatred which is growing in the heart of American men and women who see these unhung scoundrels contributing to the death of the loved ones we are sending to France.

HUNT THEM DOWN!

THE St. Louis Star of May 20, in giving an account of the inventory of the estate of Herman H. Wintzer, former treasurer of the Meyer Supply Co. of St. Louis, shows that he had invested \$5877 in German bonds and \$100 in American bonds.

We wonder how many pro-Germans there are in this country who in the future will be unable to conceal from the report of their estate to the courts their pro-Germanism and anti-Americanism by the relative amount of German bonds and American bonds which they have bought? It will be fortunate indeed if Mr. A. Mitchell Palmer can in advance run down all of these investments and find out who in this country are the holders of German bonds bought since the beginning of the European war.

And this suggests that some way ought to be found to get at the rich pro-Germans in America who are piling up great fortunes at the present time and who, though professing to be pro-Americans, are giving little or nothing to Red Cross work and subscribing but little to Liberty bonds. We have recently heard of one rich American of German birth who is making an enormous amount of money through business with genuine Americans, who contributed to the last Red Cross campaign less than \$30. We wonder if this was intended as an insult to the Red Cross, in order to show his contempt for it and its work?

Some way should be found by the Government to hunt down every pro-German, whether professing to be pro-American or not, for there are some who are hiding their real sentiments, and compel them at the point of confiscation if necessary to become subscribers in proportion to their wealth or in proportion to what real, genuine Americans are subscribing. It is an outrage upon this country and upon civilization that men of pro-German sentiment (sometimes purposely disguised, sometimes openly admitted, at least prior to the time when it became dangerous for them to do so) go on reaping fortunes out of our business activities and piling up wealth at the expense of this nation and doing nothing in return. These people are worse than the real traitors. The traitors can be hunted down, and sometimes imprisoned or shot, but there is an element to be found in the country worse even than the out-and-out traitor. They are the business men of anti-American or pro-German activities who utilize the present situation for the making of money and return none of it to the Government through Liberty bonds and little or none of it to the great work of the Red Cross.

IN OFFERING TO FOREGO SATURDAY HALF-HOLIDAYS PACIFIC COAST SHIPBUILDERS SET THE NATION AN EXAMPLE OF PATRIOTISM.

FOLLOWING closely upon the unanimous decision of the Portland Metal Trades Council to waive the customary Saturday half-holiday during the months of June, July and August in order to speed the work of building ships, the Shipbuilders and Joiners' Union of Seattle has taken similar action and both labor organizations have been sent congratulatory messages from President Wilson and the Shipping Board upon their patriotic stand. Not only was this action of the Portland and Seattle workmen voluntary, but they also agreed, if necessary, to take straight pay instead of time and a half, which they are entitled to for holiday work.

May this announcement that the shipworkers of Portland and Seattle have unanimously volunteered to press with greater vigor the building of ships be the forerunner of a general awakening among the shipbuilders of the country as to the imperative need for ships, and their responsibility in speeding up ship construction as well as among all workers that upon each individual rests a part of the burden of carrying on the war. If labor councils in other cities

should follow the example set in Portland the result would mean the addition of many ships to the building program, as more than 300,000 men are now employed in American shipyards and the total result of their labor for even half a day would be enormous.

To win this war every able-bodied man and woman in this country must work toward that end, not in a perfunctory manner, taking holidays and laying off whenever they are so inclined, but they will have to realize that before our fighting forces at the front can win success the army of toilers at home must work to the utmost every day.

A CAUSE FOR SOME OF OUR TERMINAL CONGESTION.

THAT the public is largely to blame for congested railroad conditions at terminals is shown by a circular issued May 22 by M. C. Byers, chairman of the Baltimore Sub-committee of the United States Railroad Administration, saying that there were then 563 cars of package freight on inbound platforms or held in cars, awaiting space to unload at the Baltimore terminals; that the owners of the freight for the past week had removed an average of only 75 cars per day, and there was an accumulation of package freight amounting to about eight days' supply, so that unless there was an immediate improvement in conditions it would be necessary to again place an embargo on inbound less-than-carload freight to the city.

It is not to be supposed that consignees at Baltimore are any more delinquent generally than those elsewhere, so that this warning circular may be accepted as containing a moral for consignees at other cities and towns. It also modifies a reminder that after the expiration of what is called "free time," that is, a reasonable allowance of time for freight to be removed from the platforms, the railroads are no longer responsible for loss or damage to it by fire, and that they can arrange for its removal to be stored in warehouses at the owners' expense.

To avoid placing an embargo on package freight the Administration has decided to arrange for the prompt removal to storage of such freight as has not been removed by the owners from the railroads at the expiration of the "free time," and consignees have been requested to take prompt action to avoid the additional heavy expenses which would come upon them for drayage and storage.

OVER-REGULATED INDUSTRIES.

ELSEWHERE we publish a letter from Mr. C. W. Howard of the Chattanooga Industrial Board in regard to the fuel situation. Mr. Howard was engaged as a coal-mining operator for twenty-two years. He discusses the subject, therefore, from the viewpoint of one who gave a large part of his life to an industry which since last winter has been directed by a psychologist who knew absolutely nothing whatever about the coal industry.

So far as the MANUFACTURERS RECORD can see the situation, the output for the winter in the matter of coal is far more unsatisfactory than it was a year ago. One year ago we were convinced that the coal situation, due to railroad congestion, would be very serious; at present we cannot see any change for the better over what existed last winter.

With all due respect to those who are trying to regulate everything, it is still conservative to say that many things are being overregulated and will be regulated very nearly unto death unless there is greater wisdom in the handling of many of the propositions now before the country.

NO ENMITIES EXCEPT AGAINST HUNS OF HELL.

WHEN Mr. Taft and Colonel Roosevelt healed the breach in their former friendship they gave an inspiring illustration of the feeling which should exist in the heart of every American regardless of party.

This is not a time for individual enmities on the part of any American, except enmities for the Huns of Hell. He who cannot forget past personal hostilities developed by political contests, such as that which so long separated Taft and Roosevelt, cannot be a true-hearted American.

Drastic Reduction in Amount of Support Given by Railroads Under Government Control to Commercial Organizations.

H. H. DUNN, Secretary Winston-Salem Board of Trade, Winston, N. C.

We have just received a letter from one of the railroads running into Winston-Salem in answer to bill rendered them for dues as members of the Winston-Salem Board of Trade, advising that the Director-General of Railroads has ruled that during the period of Federal control railroads will be permitted to hold only one membership in boards of trade, and asking us to render corrected bills for the six memberships held by them for the period October to December, 1917, inclusive, and for one membership for the period January 1 to October 1, 1918, inclusive, and that voucher will be made to cover.

These memberships were contracted for under a three-year contract, and are still in force until October 15, 1918. If this ruling holds, this organization alone will lose \$425 per year in memberships (a membership being \$25). But it is not so much the repudiation of this contract that is the serious proposition. If there is any organization on earth that has been the upbuilding of railroads and communities it is the chamber of commerce or board of trade through the assistance rendered the industrial and agricultural departments of the railroads of the United States. All letters of home-seekers, farmers, etc., that go to the railroads are passed on to the chamber of commerce or board of trade for their active assistance in helping to locate these people along their lines of tracks. The Government, through its different departments and agencies, has used and is using these organizations without cost to itself, but at great cost to our contributors, in spreading its activities in all directions, and the cutting off of these contributions will cripple the work of these organizations all over the country.

I believe that it is just as essential for the United States Government, through its different railroad systems, to continue payments and support with increased amounts to help these organizations bear the enormous burdens placed upon them by the Government departments as to support any other department of the Government. I do not believe there is an organization of this kind today that can be called a smokestack chaser, and three-fourths of the time, effort and expense of these organizations is now at the disposal of and is being used by the Government to help win the war.

Our small organization is doing its part, and the other organizations in the country are doing the same, and we feel that this is a matter that should be placed before the country through your valuable paper, which can see so clearly, coming in contact with our organization, that this would amount to carrying on of Government work for winning the war.

I hope that you will take the same stand in this matter that you have for the retaining of the agricultural departments of the different railroads that were to have been abolished by the Government, as I believe that our organizations are of more value than any money the Government can invest in any proposition along similar lines.

Home Guard Should Be Organized.

J. W. DUNN, Secretary Electra Boosters Club, Electra, Tex.

I read with pleasure your comment upon Mr. Courtney De Kalb's letter advocating the organization of a reserve, composed of men over 30, who, while unable to serve in the army now fighting, could be depended upon to take care of things while the flower of our young fighting men are on the front. We certainly need such a force, and now is the time to organize it.

I sincerely believe that a man ought not be permitted to vote until he can hit a bull's-eye at 500 yards. This is not to be taken as an advocacy of militarism; I had all of that I wanted. It is a curse which I hope will disappear with the destruction of German ambition, but until the curse passes from the earth men ought to be able to use a gun, march 20 to 40 miles a day, carrying equipment, in all kinds of weather, and be able to make and break camp with the utmost dispatch, besides having a knowledge of cooking, first aid to injured and the other essentials to campaigning.

I know half a hundred men in this field who would be glad to be enlisted, and who would devote evenings to training and part days to rifle range practice.

The Long-Unheeded Call of God to America*

In the summer of 1914 Germany declared war upon the United States in reality, though not in words. Every thoughtful man who had studied the course of Germany during the last 15 years should have understood that Germany in 1914 launched its long-projected war for world domination, with the distinct intention of overrunning Europe and then of overrunning the United States. We had received many warnings to that effect. Dewey, at Manila, realized what Germany meant, and many other times after the crisis at Manila Germany practically notified us that whenever she was ready, after conquering Europe, she would seek to conquer us. Only Great Britain stood between us and Germany's determination through these years of threat, just as during the last three and a half years the British fleet has been the only thing which has saved us from a condition equaling that of murdered Belgium.

We do not, however, have to look only to the physical side of war to understand what Germany has been doing for the last 25 years or more. During all of that period Germany has steadily invaded this country—not with its fleets and its armies, it is true, but with a mental invasion almost as deadly in its effect as would be the landing of millions of its soldiers on our shores. We have been horrified at the poisoning of wells by German soldiers, but the poisoning of the wells of water has not been one-half so deadly as the poisoning of the minds of the people of this country during the last 25 years. As the soul is more priceless than the body, so Germany's mind and soul poisoning exceeds in deadliness the poisoning of the wells which kill the body only.

Pro-Germanism is still in evidence in many directions, and I am afraid it is still to be found in some newspaper offices. It is time, therefore, for the editors of this country to watch with exceeding care everything which comes to them from Washington and see that it is not so worded or so played up in headlines as to create an entirely erroneous impression. You all remember that some nine or ten years ago it was discovered, through Congressional investigation, that a German steamship line had in its employ at Washington, at a pay of \$3000 a year, an important member of the Associated Press staff for the express purpose of having him so word the dispatches that were sent out as to create a favorable impression for Germany and for this German steamship line and against the building of a merchant marine in America. When the discovery was made he was promptly discharged by the Associated Press, but who knows but that there are other men doing somewhat similar work in various parts of the country? It is a well-known fact that for years Herr Ballin, president of the Hamburg-American Steamship Line, accounted the most important man in many respects in Germany next to the Kaiser, openly in public speeches in this country insisted that the United States would make a mistake if it undertook to build up a merchant marine, and said that the wise policy for this country would be to continue our industrial development here and leave to other countries the carrying of our commerce, and many American papers eagerly published this stuff. The New York manager of that line over and over again reiterated the same thought and filled the mail with pamphlets and circulars for the express purpose of discouraging the building of a merchant marine in America.

This is only one illustration of thousands which indicate the devious ways which Germany, through its spies and through its commercial agencies, sought to increase its power in this country. It was ever looking forward to the time when our lack of a merchant marine and our unpreparedness for war would make us helpless in a contest with Germany. That has been the definite policy, plain as the noonday sun, of the German Government for the last 15 or 20 years. And yet we heeded it not.

This is a definite, predetermined, prearranged war against civilization and Christianity by a country which had sunk into atheistic barbarism. For 25 years Germany had been planting—not only in this country, but in every other country in the world—its mind-poisoning campaign and its atheistic propaganda. From its uni-

versities there had gone forth a steady stream of mind-poisoning and of false doctrines subverting the teachings of the word of God. Our universities and even our theological seminaries had to a large extent been so cursed with these agnostic and atheistic teachings that this nation was in danger of forgetting God; and had that come fully to pass, as it probably would have come but for this war, we should have learned that it is still true, as when first uttered, that "the nation which forgets God shall be turned into hell."

Germany had planted its spies in every part of this country, just as it had developed throughout Europe the greatest spy system which had ever been conceived of by the devilish ingenuity of man. You may remember one typical case in this very State where a German posing as a small merchant for years carried on his trade, but who, a few weeks before the opening of the war between Germany and the United States, suddenly disappeared. Fortunately, he was captured, and it was found that he was a Prussian officer who had for years been living in this country in the guise of a small trader for the purpose of spying out every secret of the land.

It is a well-known fact that these Prussian spies were found in all parts of the country—sometimes as book agents, sometimes as colporteurs selling Bibles, sometimes as watch and clock repairers, sometimes as apparent invalids visiting health resorts, and at other times in the direct employment of our Government in the most secret and confidential relations with everything that the Government was doing. The whole nation has been honeycombed with spies. Nothing that we do in this country or have done for the last 25 years is unknown to Germany. The former head of the United States Secret Service Bureau recently stated that there are 400,000 German spies in America, and Senator Overman last week confirmed the accuracy of these figures.

The number of spies, however, great as it is, does not begin to represent the number of pro-Germans who are vigorously in every way possible working in behalf of Germany. These men and women (for there are many women among them) are stabbing in the back with poisoned stiletos the men whom this country is calling to the flag to save ourselves and civilization from destruction.

Let it be distinctly understood that this war is infinitely more than a war for democracy. We are fighting not to make the world safe for democracy, but we are fighting to save civilization itself, and to save the very existence of our own country, and to keep the women and the babies of our land from having to endure the awful horrors which those in France and Belgium have had to suffer. It is conceivable that civilization could exist without democracy, but it is not conceivable that civilization could live if the world had been overrun by German barbarism.

This is, therefore, infinitely more than a fight of autocracy against democracy. It is a fight of barbarism against civilization, of atheism against Christianity.

No one should for a moment have been surprised at the fearful crimes committed in Belgium and France, which found an apt illustration in the sinking of the Lusitania. For years German military leaders and professors had persistently taught that German "Kultur" should be extended throughout the world by the power of the sword. They taught that frightfulness should be a part of this world-wide war for which they had long been preparing. They openly said and reiterated time and time again that the complete destruction of an invaded country should be a part of their war campaign in order, by its very frightfulness, to deter other nations from running the risk of the same destruction. They taught that the people of conquered regions should be deported or destroyed in order that the country which they had occupied might be peopled by Germans. The unparalleled campaign of crime in Belgium, the unspeakable outrages committed upon the people of that heroic country, the shipment of Belgians back into German lines that they might be made as slaves to produce foodstuffs and munitions with which to fight their own people, the forcing of Belgians, men and women, in front of the firing line in order to protect German soldiers from the bullets of their enemies, are merely the natural and inevitable outcome of the teachings in Ger-

man schools and universities and homes during the last 25 years.

A story which came to me recently illustrates the whole case. A banker in Baltimore, the son of the Secretary of War of the Confederacy, had in New York a rich German acquaintance. This New York German, though born in Germany and living there until of age, is now intensely American, to his everlasting honor, for the number of such is entirely too few. Some months ago, in discussing the war with my Baltimore banker friend, Mr. William C. Seddon, this man said:

"While I agree with you that the Germany Army is guilty of fearful barbarism, you must bear in mind that this is not barbarism as viewed by the Germans. An event in my own life will explain the whole situation."

"When I was a young man in school one of the students had something which I wanted. I jumped on him, beat him up and maimed him for life in order to get from him the thing which I desired. When I went home my father and mother patted me on the back, told me that I had done right and that I must always in life take whatever I wanted and had the power to take."

"That," said this German, "is the teaching in every school in Germany and in family life. When I grew to manhood I came to America, and I have lived here long enough to understand the civilization of this country and to realize that I committed a crime in maiming for life my friend merely to take from him what I wanted. For 20 years I have supported him and his widowed mother as some atonement for my crime, but if I had continued to live in Germany it would never have occurred to me that I had done anything wrong. On the contrary, I should have felt that I was simply doing what my father and mother and my teachers commended as the proper thing for all Germans to do."

"This story," said the German, "typifies the whole life of the German people, and, however great may be the acts of barbarism as we now view them, these acts are not barbarism as the Germans view them."

I have never seen a clearer statement from a man's individual experience of the whole methods of Germany than in this particular case. We must recognize, therefore, that we are fighting a nation which knows nothing but physical force. It has lost all sense of moral standards. It has become brutalized to an extent scarcely conceivable by intelligent men. But this brutality which found expression in the act of this student finds a larger expression of exactly the same character in the destruction of Belgium and France and Serbia, of individual lives, of honor, of womanhood and babyhood, of property, of schools and of churches. In all that devastated region, wherever the accursed army of Germany has marched, there has been death and destruction such as the world had never seen.

We are face to face with a contest against a people who have carried science to a point where they can use to the utmost extent every scientific achievement for creating havoc and murdering men and women. We are face to face with the final issue in the life and death struggle as to whether America shall live or whether German barbarism shall reign supreme here, as it does wherever Germany has been able to carry its army.

Let us not for one moment minimize the task. Definitely and directly for the last 40 or 50 years Germany has been building its mighty war machine—the greatest that man has ever known—for the express purpose of pushing its domination over the world. England, living in peace, not believing it possible that Germans meant what they were saying and heeding not the urgent and persistent advice of such men as Lord Roberts and Lord Kitchener, made no preparation for an army to meet its impending fight. At the beginning of the war England had about 100,000 men who could be thrown into France. It stripped every region from which its few trained men could be taken to raise such a beggarly army as it put into France in the first weeks of the struggle to stem the onrush of barbarism. Of the 100,000 men who so heroically made that terrific fight there are almost none left. When about 6000 Canadian troops saved the day and kept the Germans from reaching Calais and thus saved civilization, only about 15 per cent. returned from that struggle. And yet when the call went out to Canada for volunteers from the regiments that were then being trained for men to fill in the gap in the Princess Patricia Regiment, which had made that heroic fight, every man answered the call and volunteered to go, though he knew that the Princess Patricia would again be thrown into the center of the most desperate contest.

This is the spirit which must prevail in this country.

*Address by Richard H. Edmonds at annual meeting of Florida State Press Association.

It is the spirit with which mothers and fathers must give up their sons, rejoicing that they have been called of God to the highest and holiest work to which men have ever dedicated their lives. The work of Adoniram Judson, the great missionary to Burma, 100 years ago, and of Livingston as he risked his life in the wilds of Africa was not sublimer nor more heroic than the work of the American soldier who, leaving home and loved ones, offers his life as a sacrifice on the altar of civilization.

This is the supreme hour of mankind. Since 1900 years ago, when upon the Cross of Calvary the Son of God gave His life to save men, there has been nothing else with which to compare the awful tragedy of this hour. All of the wars of the last 1900 years, if combined into one, would sink into insignificance in the matter of lives lost and treasure expended and tremendous issues involved in comparison with the war in which we are now engaged.

There can be no peace between this country and Germany until Germany has been beaten to its knees. An unconditional surrender of Germany is the only basis on which any man in this country has any right to think of peace. He who by thought or word or act suggests peace on any other terms is a traitor to this country and to civilization. The time has come when, in the language of Bishop Henderson of Detroit, it should be the business of every American citizen to "locate, eliminate and exterminate" every pro-German in America, for every pro-German is an enemy to our nation and a would-be murderer of our soldiers and a would-be co-partner and co-worker with the men who in Belgium and France have blackened the pages of human history with outrage and murder such as has never been recorded in all the ages.

As there can be no peace between Heaven and Hell, no peace between God and Satan, so there can be no peace between America and its Allies and Germany until the fearful barbarism of Germany has been crushed by the only power which Germans know—the power of force.

For three long years this country proved recreant to its responsibility to itself and to civilization. For three years we hid behind the battle fleets and the armies of France and England and Italy. We rejoiced in the abounding prosperity which came to us because of the enormous demand from Europe for the products of our farms and factories. We piled up wealth without end, and we said unto our soul: "Thou hast much goods laid up. Take thine ease. Eat, drink and be merry." In vain millions of starving women and children in Belgium and France and elsewhere stretched out their bony hands for help. In vain millions of Armenians, among the first Christian nations of the world, called for help as they were butchered in cold blood by the "unspeakable Turk," taught new ferocity and new ways of devilishness and barbarism by his ally, Germany. Amidst the fearful struggle of England and France to save themselves and civilization they poured into Belgium hundreds of millions of dollars to succor the dying and save the starving that that nation might still exist, while this country, rich beyond compare, living in riotous prosperity, fertilized by the blood of the soldiers of England and France and Serbia, withheld the helping hand and gave a beggarly few millions in comparison with England and France's hundreds of millions to rescue Belgium.

Who was responsible for this situation? Upon whom shall the burden be laid for our unpreparedness and for the millions of lives and the billions of treasure which must be expended because we failed to do our duty when the call of God came to us?

Upon every public man who fought preparedness; upon every newspaper which failed to realize the certainty of our being swept into this war; upon every preacher who failed to denounce the greatest international and individual immorality in human history; upon every college president and every professor and every business man and every thinking man in the country who should have been leaders in awakening the nation to these fearful conditions, but who failed to do so, will rest the death of those who now must try to save this country from that fearful wreck and ruin which has marred Belgium and France.

The United States Government itself has recently stated the case as to our failure to hear the call of God and of humanity more clearly than has ever been done by any individual. The Government has recently sent out an official statement which, if it had been issued by a private individual or by a Congressman, would have

called forth the bitter denunciation of those who are afraid to tell the truth, let the chips fall where they may. Let me read this Government statement. It is as follows:

Germany provoked war.
We held our peace.
Germany invaded Belgium.
We held our peace.
Germany dealt in frightfulness.
We held our peace.
Germany exalted ruthlessness.
We held our peace.
Germany slew women and children.
We held our peace.
Germany promoted massacre.
We held our peace.
Germany enslaved captives.
We held our peace.
Germany sunk the Lusitania.
We held our peace.
Germany sent spies among us.
We held our peace.
Germany plotted within our gates.
We held our peace.
Germany intrigued against us.
We held our peace.
Germany fomented strife among us.
We studied forbearance.
Germany destroyed our goods.
We swallowed our indignation.
Germany murdered our citizens.
We choked down our wrath.
Germany broke solemn promises.
We clung to shattered faith.

What a fearful arraignment of our own country is this official document! Germany committed every crime known to man. Germany, with ruthless immorality, overran and destroyed Belgium—we held our peace. Germany exalted frightfulness—we held our peace. Germany outraged and murdered women and children—we held our peace. Germany enslaved its captives—we held our peace. Germany sank the Lusitania and sent helpless American women and children to feed the sharks, the most ruthless act ever committed on the high seas—we held our peace. Germany filled our land with spies and we knew that all over this country German spies and pro-Germans were seeking to foment trouble among our own people, among negroes and among the illiterate foreigners from other countries; Germany blew up our munition factories and killed our people, but we held our peace.

Bear in mind that this story, which should make every honest-hearted patriot blush for shame, has been officially issued by the Government as a suggestion for public speakers. But, thank God, though we waited long, lulled into sleep by the deadly poison of German gases; though as a nation we drank deep of the poison which Germany instilled into the mind and spirit of millions of Americans, we have at last awakened from this slumber. Our eyes have been opened, our ears have been unstopped, and we see now that for long years we had preferred peace and prosperity to honor and duty. We had forgotten that sublime sentence of Robert E. Lee that "duty is the noblest word in the English language." We had not found the spirit of a young Canadian friend of mine, Clifford Wells, a graduate of Johns Hopkins University, who, when the call came from Canada, dropped his books, went home and enlisted, and, writing to his mother from the battlefield shortly before he was killed in action, told her not to worry, "for," said he, "I am only doing my duty and nothing else matters now."

We must now do our duty in this war as the sublimest work to which the Almighty has ever called us. We must recognize that in doing our duty nothing else matters, for he who fails to do his duty will be recreant to every responsibility to God and man. This is a time which must test the manhood and the womanhood of the nation. It is a time which will test the moral fibre of the country. It will call into being the latent patriotism of the whole nation. It will stimulate all that is pure and holy in life, and it should send to the scrap heap all that is unholy and untrue. It will bring the nation nearer to God, and as this country rededicates itself and reconsecrates its all of mind and soul and body, every ounce of its physical, moral and financial strength to the great task before us, we shall as a nation rise to sublimer heights of manhood and womanhood than we have ever known before. Suffering we shall have without end. Into every home sorrow may

come, for all of us shall have to see our loved ones go out on the great mission, the great crusade of offering their lives that others may be saved, but we shall have a profound sense of heroic exaltation that these men, these beloved ones, dearer to us than life itself, have been called by God to follow the example of His own Son in offering their lives that others may be saved.

To this task let us individually, as in the sight of God, pledge all that we are and all that we have, and never falter as we go forward in the great work of saving our nation and civilization from the fearful power of a nation which has sold its soul to the devil in hopes of securing world domination.

INDUSTRIAL CANAL TO COST \$12,000,000.

Plans Completed and Construction Begun on Important New Orleans Enterprise.

With the determination of details for the industrial and navigation canal recently announced as to be constructed at New Orleans, work has begun and will be continued as rapidly as is possible under the conditions prevailing during the period of the great war. This canal, connecting the Mississippi River with Lake Pontchartrain, will, with its numerous laterals, facilitate the establishment of important manufacturing and other similar industrial enterprises at the big Gulf Coast city. Manufacturers have already been inquiring regarding the purchase of plant sites, and it is understood that several shipyards have already been secured for establishment this year. On each side there will be 1000 feet of land flanking the canal. The initial cost will be from \$3,000,000 to \$4,000,000 and the ultimate cost will be \$12,000,000.

Outlining this important project, J. Devereux O'Reilly writes to the MANUFACTURERS RECORD:

"The Board of Commissioners of the Port of New Orleans, an agency of the State of Louisiana, is the organization in charge of this work, and its chief engineer is J. Devereux O'Reilly. Construction of both canal and lock will be by the board's own forces. Estimated ultimate cost, \$12,000,000. This canal will be 5½ miles long, with a width of 150 feet at bottom and 350 feet at the top, while the depth at mean low water will be 25 feet. Actual work was begun May 5 and will probably be completed by December 31, 1919. George W. Goethals & Co., Inc., New York, represented by G. M. Wells, are the consulting engineers, who are designing the lock and canal."

Big Plans for Increasing By-Product Coke Output.

H. Koppers Company announce that they have been awarded a contract by Jones & Laughlin Steel Co. for the construction of a by-product coke plant of 300 ovens. This plant will have a carbonizing capacity of approximately 2,000,000 tons per year, and will replace beehive coking capacity to that amount. The plant will be complete in every respect, and will be equipped for the recovery of ammonia in the form of ammonium sulphate, of tar and of benzol and toluol as pure products. The ammonium sulphate and pure toluol from this plant will be sold to the Government for war purposes. The steel company proposes to use the gas in its steel-plant operations.

It has also been recently announced that H. Koppers Company are to build two more batteries of by-product ovens for the plant of the Steel Corporation at Clairton, Pa. This will give the Steel Corporation a plant of 748 ovens, which when completed will be the largest by-product coke plant in the world.

The plant of the Illinois Steel Co. at Gary, Ind., which has recently added 140 Koppers ovens to its original installation of 560 ovens, is at present the largest by-product coke-oven plant in the world.

Recent announcement has been made in the papers of the incorporation of the Fairmont By-Products Corporation at Fairmont, W. Va. This company has been formed to build and operate a by-product coke plant. A contract has been given to H. Koppers Company for the construction of a plant to consist of 110 ovens, with the necessary boiler plant and accessories. The plant will produce ammonium sulphate and pure toluol for Government purposes and tar and benzol for general industrial use. The plant will also deliver a large amount of coke oven gas to relieve the shortage of natural gas in the Fairmont district. An attractive site has been selected near Fairmont and a number of houses will be built for employees of the plant.

Nation Awakening to Labor Situation

FAR-REACHING MOVEMENTS FOR UTILIZING ALL MAN POWER

[Special Correspondence Manufacturers Record.]

Washington, D. C., May 27.

Despite the somewhat vigorous protest to the country by Secretary Baker, the conviction is strongly held that the new regulation by the Provost Marshal-General's office regarding idlers of draft age and those now engaged in so-called "non-useful employments" constitutes the first step in the indirect conscription of labor.

This conviction is made the more binding through the explanation of the regulation as given out by General Crowder at the time of its issue. He laid stress on the labor situation of the country and the primary necessity of diverting into useful channels the man power that is now being utilized in many ways not at all conducive to the prosecution of the gigantic war task laid upon the nation.

Secretary Baker's interpretation of the regulation is generally held as having been designed to allay the apprehension of labor organizations on the question of the right to strike. This point has been clung to tenaciously by Samuel Gompers and other labor leaders, and any attempt to set it aside by a process of indirection would meet with their intense opposition. The attitude taken by the labor leaders is that it constitutes a fundamental right of labor which no exigency can take away, even though a tacit recognition of the supreme emergencies of the nation might lead labor to hold the right indefinitely in abeyance.

But apart from this consideration, it is altogether evident that the new regulation of the Provost Marshal-General means that every man of draft age shall by July 1 not only be engaged in employment, but that the character of the employment, within certain stated limits, is to be determined by the Government, or else that he shall face the alternative of immediate induction into the army. In other words, the doom of the idler and slacker of draft age has been sounded, and it will be "work or fight" for him after the end of the coming month.

It is no secret that the difficulties which have been encountered in the munitions factories, shipyards, steel plants and other organizations which are depended upon to turn out ships, guns and ammunition have been numerous and at times formidable. One of the immediate results expected of the new regulation is that it will put an end to the "floater," the workman of acknowledged ability in his line, but who has taken advantage of his technical skill to wander from place to place, insistently demanding a higher wage rate as a bribe for continuing on the job, and in a majority of cases getting it. The result has been demoralizing both to himself and to the trade in which he is engaged. A weakening of the sense of moral responsibility has ensued; there has been developed a growing indifference to the tasks at hand and a general letting down in the combined output of many essential industries has followed. In some instances a state of querulous dissatisfaction has been bred in the minds of the workmen, occasionally going to the point of laying down their tools because they "didn't like the looks" of the foreman, or some other equally important grounds. This, of course, represents an extreme instance, but it illustrates the demoralizing tendencies of impermanent labor, with constant shiftings from place to place under the lure of the higher wage.

There are evidences, however, that all this will come to an end. Most encouraging is the resolute manner in which the various States are taking hold of the labor problem and of the activity of communities where the States themselves have not yet risen to a keen appreciation of the situation and demonstrated their intention to meet it in determined fashion.

In previous articles in the MANUFACTURERS RECORD some of the developments along these lines have been indicated, and to those it is now possible to make some important and significant additions.

Here is what the Governor of Virginia has done within the month to meet the situation as regards the propaganda for the putting in of the best licks on the farms of the old Commonwealth:

COMMONWEALTH OF VIRGINIA.
GOVERNOR'S OFFICE,
Richmond.
FARM LABOR.

A PROCLAMATION BY THE GOVERNOR OF VIRGINIA.

Whereas, Virginia gives of her sons and treasure that Kaiserism shall not conquer the world, and is determined

that nothing shall be withheld from the support of the war against Hun Junkerdom that would make of us a servient people; and

Whereas, this war cannot be won unless we also bring forth food in abundance, and multiply our labor to that end, for the strength of our army and those of our allies is measurable in terms of available food; and

Whereas, the scarcity of farm labor in Virginia, as in the other States, threatens a great decrease in food production, which is a situation pregnant with danger to the nation and to the cause of the allies; now, therefore,

I, Westmoreland Davis, Governor of Virginia, do call upon all the people of Virginia, and especially those who are not engaged in some other necessary war work, to render the labor required now by our Virginia farmers in planting, and which will be required at harvest time, by going upon the farms of the State to work.

To emulate the noble example set by the women of France, who, in response to the appeal of Premier Viviani, gathered the crops in 1914 while the gallant sons of France saved democracy at the Marne, and who now till those battle-scarred fields while their men fight for the freedom of the world, I call upon you, the people of Virginia, to go upon the farms and by the contribution of your labor help provide the food required to win the war.

I urge you in the stirring words of Viviani's historic appeal to the women of France:

"In the name of the Government of the Republic, in the name of the nation whole and complete which stands behind it, I appeal to your valor, to that of the children whom their age and not their courage prevents them taking part in the combat. I call upon you to maintain the work in the fields, to complete the harvest of the year, to prepare that of next year. You cannot render a greater service to your country. It is not for you, it is for her, that I make this appeal to your hearts. You must safeguard your means of livelihood, provide food for the urban populations, and, above all, secure adequate supplies for those who at the frontier defend civilization and law in defending the independence of the country."

Given under my hand, and under the Lesser Seal of the Commonwealth, at Richmond, this seventh day of May, in the year of our Lord one thousand nine hundred and eighteen, and in the one hundred and forty-second year of the Commonwealth.

(Seal.)

WESTMORELAND DAVIS,
Governor.

By the Governor:

B. O. JAMES,

Secretary of the Commonwealth.

If it be observed that there are no "teeth" in the proclamation, something of the mood of the State officials of Virginia may be gathered from reading the following statement, signed by the State Commissioner of Labor and the Chairman of the Legislative Commission on Farm Labor:

GO TO WORK OR GO TO JAIL.

Whereas, the Governor of Virginia has issued a proclamation calling attention to the urgent need of farm workers; and

Whereas, the welfare, if not the life, of our State and nation at this most critical time in our history demands the greatest possible production of all necessary commodities, particularly farm produce; and

Whereas, it has come to the knowledge of the proper authorities that many men, both white and colored, are ignoring their responsibilities as citizens and producers by not working at regular employment;

Therefore, it has been deemed expedient to call attention of all such people to the fact that before any drastic action is taken against them under the law an opportunity be given them to make good by securing continuous employment. It is believed and hoped that this notice will be ample without further actions by those charged with enforcement of the laws, to whom reports will be made from each locality.

This is one instance of the spread of the movement. Another is found in the awakening now in progress in the neighboring State of North Carolina. Stirred by the exposition of the needs of farm labor, the Governor of North Carolina has issued a proclamation calling on all of the counties of the State to hold mass-meetings on May 29 for the purpose of selecting delegates to the convention which is to be held at Raleigh on June 4. It is proposed at this convention to discuss general labor problems within the State from all angles. Secretary of Labor Wilson has been invited to attend the Raleigh meeting, and it is understood he will accept the invitation. It is quite possible that the occasion will be signalized by a more definite announcement of the policy of the department on labor problems, especially in connection with farm labor, than has hitherto appeared.

Officials of the Labor Department are somewhat guarded in their expressions with respect to the new regulation by General Crowder. John B. Densmore, Director-General of the United States Employment Service, indicated that his bureau would regard with

interest any steps taken which might bring into view a new and valuable source of labor supply, but declined to comment on the probable outcome of the enforcement of the "work or fight" regulation as serving to furnish the much-needed recruits to lines of essential employment, either in the plants or on the farms. That was a matter, Mr. Densmore said, that would be demonstrated one way or another in due time, and that consequently any advance speculations were without particular value.

Speaking of the labor situation in general and the best means for its stabilization and for making it more efficient in every respect, Mr. Densmore mentioned three essential requirements for labor in general, although the last two in the order of importance are the only ones that apply specifically to the problems of farm labor. These, as he gave them, are:

(1) The problems of local housing and transportation.

(2) Standardization of wages, in order to eliminate the incentive to the workman to move from one plant to another.

(3) The securing of all labor through a central Government employment agency.

The first of these requirements, Mr. Densmore indicated, must be met more particularly in the large centers of population. As conditions now are, many good workmen leave their employment because they cannot find suitable quarters for themselves and their families. The normal housing capacity of the community has been completely absorbed. A greater difficulty is met when the attempt is made to introduce two or three shifts where but one shift was in force before. The men cannot get suitable quarters or proper transportation, and so they go elsewhere. The Government will soon accomplish much in overcoming these drawbacks through the utilization of the \$800,000,000 appropriation contained in the housing and transportation bill now pending in Congress, and which will undoubtedly become a law at this session.

As regards the needs for a central employment agency under Governmental direction, Mr. Densmore said that only such an agency would meet the requirements of the workers and the nation alike. The Government naturally is interested in the individuals and also in the war work, and consequently would be exercised in getting the right man in the right place, whereas the private employment agencies are concerned only with getting the man a place, and not with his suitability for the place or the permanency of his stay.

On the point of standardization of wages, it was obvious from Mr. Densmore's general remarks that he considered a higher wage rate for farm labor in the South as imperative to hold the labor, in view of the unexampled wages offered by plants and factories. This situation will be intensified rather than ameliorated with the greater utilization of the opportunities of the South for additional industrial enterprises on a large scale, as instanced in the two large pieric acid plants projected for Little Rock and Brunswick, and the development of the building of concrete ships in the South as a part of the plans of the Shipping Board now being perfected for such operations at Wilmington, Jacksonville and Mobile.

These are all typical of existing labor problems and the way in which they are being met, or must be met, not only in the South, but elsewhere throughout the country. Some of the evidences which have come to the notice of the officials of the Labor Department, and commented upon by them to the MANUFACTURERS RECORD correspondent, indicative of the trend of public opinion in other parts of the country, are fully as interesting. One of the stories was of a Massachusetts judge who interrupted the proceedings in his court long enough to address the audience in the spectators' gallery, which included about 20 men of various ages and types. The judge inquired their mission in court and asked them why they were not at work. Urging patriotism in his plea, the judge told the men where work was to be had, and particularly of the demand for men to do agricultural work. Of like character and even more provocative of results is the action being taken in many parts of the far West, where licenses for pool-rooms have been made so high in many communities that such loafing places have been compelled to close their doors.

All in all, the country is waking up on the question of labor, and if there be any doubt as to whether the Provost Marshal-General's office means business in its new regulation, no such doubt applies to the intention of the American people to see that the slacker and the idler finds useful employment, and that very soon.

MOBILE TO BE GREAT SHIPBUILDING CENTER.

With Selection as One of Sites for Concrete Boat Building, Every Style of Vessel Will Now be Constructed There.

Mobile, Ala., May 24—[Special.]—Next to the great shipbuilding ports of the East and of the Pacific coast, Mobile is now assured of the most pretentious yards of the United States. Announcement by Chairman Edward Hurley in Washington last Saturday that Mobile had been awarded one of the United States shipyards to construct concrete ships of 7500 tons, although expected from previous reports circulated, caused great rejoicing at Mobile. That announcement means that practically every kind of shipbuilding will be done at this port. Already the steel and wooden craft were being built.

The concrete plant makes for this city six shipbuilding plants of consequence, as follows:

The Chickasaw Shipbuilding Co., consisting of 10 ways, is a subsidiary of the United States Steel Corporation. This industry is now commonly referred to here as the \$10,000,000 corporation.

The Alabama Drydock & Shipbuilding Co., consisting of four large shipbuilding units. This company is also building a 10,000-ton drydock.

The Mobile Shipbuilding Co., having six ways and a contract to construct 18 vessels of 3500 tons.

The Henderson Shipbuilding Co., with Government contracts recently completed for U-boat chasers and which is now to put in a \$100,000 marine railway for Government work.

The Murnan Shipbuilding Corporation, building four 3500-ton vessels for the Emergency Fleet Corporation.

Briefly, here are the important facts concerning the Government concrete shipbuilding plant:

Concrete shipyard will have four building ways, so that work can be done on four ships continually, or as long as that type of vessel is desired by the Government.

Yard will be built as soon as possible. Charles M. Piez, vice-president of the Emergency Fleet Corporation and chief of the production and construction division, estimates that it will take about 90 days to build the yards from the time work commences.

Ninety days after the yards are completed it is expected to launch the first concrete ship at Mobile. This means that when the Mobile yards get well under way they will be able to turn out a concrete ship of 7500 tons dead weight every three weeks.

Information received here estimates that 250 men will be employed on each ship, meaning that approximately 1000 men will be employed at this plant.

Information from shipping board heads received in Mobile state that Mobile was selected for the Government yards only after examining every apparently favorable location on the Gulf coast. Mobile was recommended as the point having the most advantages. New Orleans was named as second choice and Galveston third.

The principal determining factor in favor of Mobile was its excellent rail and water transportation facilities. Other factors which gave Mobile preference over other Gulf points were abundance of suitable labor, easy access to cement, steel and timber for the yards and ships and a good site at reasonable cost and advantageously located along deep water.

It was pointed out that at Demopolis, Ala., a very fine grade of cement in abundant quantities could be made available with certain improvements to a plant that had been in operation there, but which would have to be somewhat enlarged to meet anything like Government needs for a plant at Mobile of the size of the concrete yard just announced by Chairman Hurley. It was also shown shipping board experts who were sent to Mobile to investigate sand deposits that an extra high grade of sand for cement work was available in inexhaustible quantity from the river bed not very far from Mobile. Another strong argument presented was the minimum cost of transportation involved, industries being absolutely independent of railroads as a result of the navigation of the Warrior and other Alabama rivers.

Considerable data of this nature was supplied Federal experts by the Mobile Chamber of Commerce.

The site will be directly opposite Mobile on an island separated from this city by the Mobile River and known as Blakeley Island.

With the announcement of Mobile's selection came additional information that the ships to be built at Mobile first will be tankers intended for use in the oil-carrying trade between Mexican ports and the United

States. There is a well known and very serious shortage of tankers, and the shipping board plans to build 30 or 40 of them as soon as possible. When enough concrete tankers are built, it is then understood to be the purpose of the board to build the usual run of concrete ships at the Mobile plant.

SOME SOUTHERN SHIPYARDS WORKING DAY AND NIGHT.

Great Headway in Ship Production in South Atlantic Ports.

Jacksonville, Fla., May 24—[Special.]—With the launching the last week in May of one of the big 9500-ton composite ships by the Merrill-Stevens Company of this city and the completion early in June of three 3500-ton wooden steamers of the Ferris type by the Morey & Thomas yard, J. M. Murdock yard and shipyard of the United States Shipping Board, all in Jacksonville, the fourth district, will have begun the last lap in the race for intensified ship production close behind the foremost district building cargo carriers under the Government program.

According to a communication from James O. Heyworth, general manager of wooden ship construction of the United States Shipping Board, to District Supervisor W. C. McGowan, it is stated that by July or August, at the most, the shipyards of the South Atlantic and Gulf States will be as far advanced in progress on the vessels under construction for the Government as are the yards on the Pacific coast. This statement by Mr. Heyworth is received with a great deal of enthusiasm by the various ship contractors, workmen in the yards and local officials of the Shipping Board, and has resulted in the men redoubling their efforts to be among the first to launch one of the new vessels.

When it is taken into consideration that the yards on the Pacific coast have always had an abundance of lumber and material at their command, while those yards in this section were for a time seriously handicapped on account of logs and lumber until the concentration yards were established in Jacksonville, Brunswick and Tampa, the progress made by the Southern shipbuilders demonstrates that the South is forging to the front as a great shipbuilding center, inasmuch as the work can continue undisturbed winter and summer.

The fact that in Jacksonville the shipbuilders have at their finger tips manufacturing plants supplying them with many necessities, such as chains and other essentials entering into the building of ships, has been a great aid to plants in operation and has offered added inducements to prospective builders, so that today there are approximately 7500 men employed in this important industry in this city, with a monthly payroll totaling \$500,000.

Many of the yards in the Fourth district have been working day and night shifts for several months in order to speed up the launching of the vessels for the Government, these plants being the Merrill-Stevens Company, Morey & Thomas Company, J. M. Murdock, shipyard of the United States Shipping Board, all in Jacksonville; the Tampa Dock Co., at Tampa; the American Shipbuilding Corporation of Brunswick and the National Shipbuilding Corporation of Savannah. Up to the present time the United States Maritime Corporation of Brunswick, the North Carolina Shipbuilding Corporation of Morehead City and two other yards have not begun to work their night shifts, but expect to increase their force immediately.

Work on the steel ships at the Merrill-Stevens Company in Jacksonville, the Terry Shipbuilding Corporation at Savannah, Tampa Shipbuilding Corporation and Oscar Daniels Company at Tampa is progressing rapidly, and during the summer months launchings of wood, composite and steel vessels will occur regularly.

To Build Pleasure Boats.

Pleasure craft will be constructed at St. Petersburg, Fla., by the Avery-Roberts Marine Ways Co., organized with \$50,000 capital to succeed Avery & Roberts. A. P. Avery, president; George L. Roberts, vice-president; Howard Frazee, secretary; O. G. Hiestand, treasurer.

For Copper and Iron Products.

Copper and iron products for maritime purposes will be manufactured by the Curtis Bay (Md.) Copper & Iron Works, incorporated with \$1,000,000 capital by William F. Cochrane of South Baltimore, Md.; M. C. Whittaker of Curtis Bay, Patrick H. Loftus of New York and others.

Shipbuilding Notes.

Under the supervision of the United States Shipping Board, the American Chain Co. of Norfolk will build two additional factories and double its chain works. The output will be anchor chains for the merchant ships which the Government is building.

An expenditure of \$2,000,000 for building additional ways and providing other accompanying facilities for steel steamships up to 15,000 tons is contemplated by the Bethlehem Steel Corporation, Sparrows Point, Md.

The Newport News (Va.) Shipbuilding & Drydock Co. may enlarge its plant to the extent of 50 per cent. Plans for such an addition are under consideration by the Emergency Fleet Corporation.

A shipyard may be established at New Orleans by the Bates & Rogers Construction Co. of Chicago, recently mentioned as contemplating a plant for that city. This company is a general civil engineering and contracting organization with offices at Chicago, Cleveland and Spokane.

Another shipyard will be established at Mobile. It is planned by Russell M. Thompson and Thomas J. Kelly of the Alabama Drydocks & Shipbuilding Co., who will organize a \$100,000 company for the new enterprise. A site has been secured on Blakeley Island, where there are already four shipbuilding plants.

Stock-Raising Industry May Be Built Up in Valley of Lower Rio Grande on Basis of New Grass.

McAllen, Tex., May 24—[Special.]—Such remarkable success has attended the growing of Rhodes grass in the lower valley of the Rio Grande since its introduction here five years ago that the new crop promises to revolutionize the agricultural condition of what has been heretofore an essentially vegetable and sugar-cane-producing region. H. Clay Harvey, a farmer near McAllen, known as the "Rhodes Grass King," was among the first in the valley to realize and prove the importance of the new forage and grazing crop.

Mr. Harvey believes that Rhodes grass is the one crop that will make more money for the farmers of this section than anything else they can grow on their farms. He had 60 acres planted to the grass, and receives rentals amounting from \$60 to \$75 an acre.

One farm which had been planted to Rhodes grass was sold for \$300, Mr. Harvey states. The returns from the farm in the sale of hay amounted to 25 per cent. of the selling price.

"Rhodes grass has made it possible for this valley to become a livestock region, and that is our hope for the future," Mr. Harvey says. "Many of our farmers are trying the Rhodes grass, and it is to be hoped that in a short time they will cease to gamble in truck and adopt the substantial basis of cattle, hogs, sheep and Rhodes grass, together with alfalfa, corn and broom corn."

Splendid Patriotism Shown by Negroes Worthy of Highest Commendation.

Jackson, Miss., May 24—[Special.]—Mississippi's negroes are wide-awake to the war. No better proof could be had than that of their response to appeals for the second Red Cross war fund. In a number of communities the negroes raised the entire quotas by themselves, leaving the white citizens to oversubscribe.

The State was asked for \$350,000, and almost doubled that amount. Workers in every county give full credit for the magnificent oversubscription to the colored workers and contributors. Not only did their dollars help, but the spirit they displayed and their unselfish generosity inspired the white citizens to give more.

White speakers addressed the negroes at churches and schoolhouses before and during the campaign, and no instance is reported of a failure to respond openheartedly. In fact, leaders among the white people in Mississippi have expressed themselves as frankly amazed at the patriotic spirit of the negroes, who need but to have the country's cause explained to them to make them ready to give and to fight.

Big Coopersage Company Chartered.

A \$250,000 coopersage enterprise has been chartered at Macon, Ga. It is the Massee Coopersage Co., and the incorporators are W. J. Massee, O. J. Massee, Jr., T. D. Massee, George W. Morningstar and E. S. Fetner.

William I the Prototype of His Grandson, the Present German Kaiser

[L'Illustration of Paris in the March 16 issue prints a photographic reproduction of a letter from Eugenia, then Empress of France, to William I, and his reply thereto, together with printed texts of the letters, a translation of which is given herewith. The correspondence took place in the last days of the Franco-Prussian War, when France, bleeding under the heel of a ruthless victor, asked in vain for the consideration and justice which would have been rightly expected from a humane adversary.]

William I, like Kaiser Wilhelm of today, could play the role of a hypocrite, and tried to deny that the war made upon France at that time was a made-in-Germany war. And yet Bismarck's Memoirs show, as he freely admitted, that he had deliberately lied in the changing of a telegram for the express purpose of bringing on the war. At that time Germany was ready for the war against France, and Bismarck, wanting an excuse, committed the perjury of changing a telegram from France in order to create the conditions which would enable Germany to say that France was preparing to attack Germany, and thus cause the people of Germany to think that it was a war of defense; whereas it was a definitely prearranged war of conquest, just as is the present war. But William I, carrying out the predetermined plans, overran France and demanded Alsace-Lorraine as a part of the spoils of victory. It was another case of a prearranged war, and it was for the express purpose of looting France of the great stores of iron-ore in Alsace-Lorraine; and then by looting France of a billion dollars in addition to Alsace-Lorraine, Germany made war financially profitable.

That is what Germany undertook to do this time.

In his reply to Eugenia's piteous appeal for compassion, Emperor William cold-bloodedly announced that his country had made immense sacrifices for defense—when it had definitely entered upon a war for conquest, and then cold-bloodedly announced that they proposed to retain Alsace-Lorraine, not for any sentimental reason connected with the past, but merely because they had the power to do so and because they wanted to utilize these two provinces as a buffer State between Germany and the outraged France, which he felt would some day seek to avenge the war that had been so wickedly made upon it.

It has long been known that the real reason for demanding Alsace-Lorraine was Bismarck's determination to capture the vast ore supplies in that region as the foundation for Germany's industrial development. But while Germany at that time took all of the land which was known to carry iron ores, later discoveries developed enormous supplies of iron ore beyond the new border line and over in France; and ever since that discovery was made Germany has been trying to plan a way to capture by conquest these additional ore supplies in order to rob France for Germany's enrichment. The battle of Verdun was in reality a fight for the iron ores near Verdun, and that was the reason why Germany was willing to slaughter its men at that point in the attempt to gain possession of these vast ore supplies, which are still in French territory.

Murder, in order to loot and rob France, was the cause of the Franco-Prussian war, just as the desire to murder and loot was the cause of this war. At that time Emperor William thought it sufficient to murder and loot France. His grandson, with a wider vision and a more grasping ambition, has sought to murder millions of the people of other lands in order to loot the world.—Editor Manufacturers Record.]

By MINNIE E. GOULD.

At the climax of their careers the world gave William I, of Prussia, and Eugenia, Empress of the French, a judgment contrary to that which might be passed today. The average Victorian would scarcely think Eugenia, the frivolous inspiration of the brilliant court of the Second Empire, whose marriage, even with a Bonaparte, was considered a misalliance, superior to the leader of Prussia's triumphant troops, the king whose military genius made him a major-general at 21.

William I, when merely King of Prussia, possessed an overpowering desire to unite all Germany under the control of Prussia. This was fulfilled during the siege of Paris, when he was proclaimed German Emperor. It is interesting to compare his passion with the present Kaiser's plans for world dominion. This man, whose insane longing we are struggling to make vain, is a true descendant of one who not only believed in a god of battles, but in his own divine right as earthly representative of such a god.

And opposed to William is Eugenia, the aged Empress, once the most famous beauty in Europe. Banned from her country, for which she gave her best efforts, she is still her champion, bringing forth this further exposition of Teutonic ruthlessness.

[Translation of Article in L'Illustration.]

The Letter from the King of Prussia.

During the autumn of 1870 the Empress Eugenia wrote an appealing letter to William, then King of Prussia only, the text of which we reproduce from a copy—without date—which is found in the National Archives. (Named Regent on July 23, Empress Eugenia was obliged, on the evening of September 4, to leave Paris for Belgium, from which she gained England.)

Sire:

The misfortunes which overwhelm my country deter-

mine me to address Your Majesty directly. I take the courage for this step from memories of the past.

Has not blood enough been shed? Has not the moment come to treat with the French nation, and does not Your Majesty believe that a general peace, creating indissoluble bonds between the two countries, and not imposing a cruel stigma upon France, would give the King one of the greatest titles of glory in posterity?

Sire, events are judged better in misfortune. The feelings which I express to Your Majesty ought to inspire the King's heart.

I am ready for every personal sacrifice in the interest of France, but, I ask the King himself, can I sign a treaty which would impose an irreparable sorrow on my country?

May God forever spare Your Majesty's heart from the bitterness which fills my own.

EUGENIA.

These keen and dignified words the King of Prussia answered with the letter from which M. Pichon, Minister of Foreign Affairs, read an extract the other day at the ceremony of the Sorbonne. We are publishing today a facsimile of this letter. It is altogether in the handwriting of the King of Prussia and it is dated from Versailles, October 26, 1870. The paper is of distinction by its dimensions and quality. It also has gilt edges. The water-mark, which cannot be distinguished in the photograph, reproduces in the left corner of the first sheet the profile of the Prussian King himself, and in the center of the second sheet are emblazoned the Prussian arms.

You will notice in the flat, fine writing of the future Emperor of Germany—writing which is rather characteristic of his epoch—very German features, such as reversed circumflex accents surmounting "u," "c," "e" and "o." It is especially to be noticed that the royal letter is signed "Your Majesty's Devoted Brother," which is most German of all, considering the intentions which the letter expresses.

The Empress Eugenia made, about a month ago, a gift of this precious document to the National Archives and in circumstances which we are not permitted to re-

veal, but which we may say of the greatest honor to the giver.

The letter from the King of Prussia shall be henceforth preserved in the National Archives in the "Armoire de Fer." This is a special place where other historic pieces are shut up, notably the will of Napoleon I. It bears the figure "A. E. I. 27."

It is to be read and reread from the prefatory "Madame" to the "William" abundantly flourished. It is to be read and meditated upon. M. Stephen Pichon, while revealing the text of it, said at the Sorbonne:

"It is not ourselves; it is the King of Prussia who charges himself in contemporary declarations of the criminal act which he accomplished in taking possession of our two provinces to justify the claim which represents him as not wanting to do anything but retrieve German lands in incorporating Alsace and Lorraine by right of conquest into his empire."

Yes, it is only then a question of withdrawing the point of departure from the French armies, which, "in the future," were going to attack Germany. And M. Pichon adds:

"Is this clear, and could a clean sweep better be made of the legend which the Count Hertling endeavors to spread and according to which the annexation of Alsace and Lorraine would have had for its source in the minds of its authors the longing to give back to Germany the German lands of which she would have been dispossessed by French usurpation?"

They have indeed tried to make the world believe this and to allege that France attacked Germany, in fact, in the first days of August, obliging the Teutonic armies to throw themselves upon Belgium. But who will give credit to their lies hereafter, especially now that the telegram to M. de Shoen is known and it is proven that the Government of the Kaiser maneuvered to force France to take a belligerent position?

The Germanic processes have never varied, then, in violence as in knavery. The grandson is worthy of the grandfather. William II has repeated "I did not wish this war," and the other William said, while a "devoted brother" to the Empress Eugenia, "in this war, which your Majesty knows well was not provoked by me." And there was the dispatch of Ems. Yes, "no one more than they deplore the bloodshed," but they continue to stain Europe with blood and to plunder it, the while protesting their good intentions. Today Europe is no longer their dupe. We have now, to judge the guilty, convincing proof. This letter from the King of Prussia is one of them.

We publish below the printed text of the letter in order to facilitate the difficulties of deciphering the handwriting:

Madame:

I have received the letter which Your Majesty kindly addressed to me, and which has evoked memories of the past which I cannot recall without regrets.

No one deplores more than I the bloodshed in this war, which, Your Majesty well knows, was not provoked by me.

Since the beginning of hostilities my constant preoccupation has been to neglect nothing to give back to Europe the benefits of peace if the means for it were offered by France. The understanding would have been easy while Emperor Napoleon thought himself authorized to parley, and my Government had not yet refused to hear the propositions of Jules Favre, and to offer him the means of giving peace to France again. When negotiations appeared to be broached to Ferrières in the name of Your Majesty, an eager welcome was given them, and all facilities were accorded Marshal Bazaine to get into connection with Your Majesty, and when General Boyer came here it was still possible to arrive at an arrangement if the preliminary conditions could have been fulfilled without delay. But the time passed without the guarantees indispensable to entering into negotiations having been given.

I love my country as you, Madame, love yours, and as a consequence I understand the bitterness which fills Your Majesty's heart, and I sympathize with it sincerely. But after having made immense sacrifices for her defense, Germany wishes that the next war will find her better prepared to repulse the aggression on which we may count as soon as France repairs her forces or gains allies. It is this sad consideration alone, and not the desire to enlarge my country, whose lands are already great enough, which forces me to insist on these cessations of territory which have no other end than to retreat the point of departure of the French armies, which in the future will come to attack us.

I cannot judge whether Your Majesty was authorized to accept in the name of France the conditions which Germany demands, but I think that in doing so she will have spared her country many evils, and will have preserved it from the anarchy which today menaces a nation the prosperity of which the Emperor has succeeded in developing during 20 years.

Please believe, Madame, in the sentiments with which I am,

Your Majesty's
Devoted Brother,

Versailles, October 26, 1870.

WILLIAM.

How North Carolina Has Responded to Thrift Conditions Imposed by War

By S. G. RUBINOW, Assistant to Director Agricultural Extension Service.

The Commonwealth of North Carolina has just taken stock of itself. And the survey just completed has shown some very interesting conditions. There is probably no other State which is responding better or more seriously to the exacting conditions imposed by the great war than the Tarheel State. Privation, sacrifice, saving, thrift, stimulation of production and other factors upon which the successful issue of the war depends have been very zealously and religiously practiced in North Carolina this year. All indications point to a continuation of duties with which we are associated, and which the Government is so earnestly demanding.

Under the joint auspices of the United States Department of Agriculture and the United States Food Administration the North Carolina Extension Service has succeeded in making a record drive in ascertaining food and feed conditions in households and upon farms and in determining the tenor of public rural opinion as to the feeling which our people have in promoting everything that will lead toward success in this crucial hour.

This survey, or stock inventory, which has just been completed, included 60 counties in every one of the three geographical sections of the State. The magnitude of the survey can be realized when it is said that it included 1500 typical rural and urban homes of white and negro families, embracing all sorts of races, professions, conditions, incomes, modes of living and locations. To make this gigantic survey feasible 60 farm and home demonstration agents of the North Carolina Extension Service conducted the survey, and one of the results of which North Carolina is proud is that the total number of satisfactory schedules obtained has exceeded by a very large margin the efforts of the other States conducting their part of the survey at the same time.

Conducted on a purely voluntary basis, this survey, with 1305 satisfactorily completed schedules, stands out as a monument to the patriotism of the people of the State, who responded with information and data, and bears evidence of the industry and energy of the agents who made the survey. This survey is the completion of the first attempt to take stock of conditions in North Carolina, made August 31, 1917. The results obtained in both surveys are of such interest to the State that this means is taken to point out some of the interesting and valuable conclusions which have been gathered.

"In this present emergency," Secretary Houston has stated, "it is essential that the Government and the people know how much food there is on hand, how much people are using and in what way they are using it. This information is desired as a guide in the conservation and utilization of food supplies for the military establishment of the United States and for the countries associated with us in the war."

To answer this question correctly, every State in the Union was charged with the responsibility of undertaking a gigantic food survey, and the plans, which have just now borne fruit, included a very intensive scanning of conditions in North Carolina. The writer, who was responsible for conducting the administration of the survey, relied on the loyalty and fidelity of householders and agents in detailing his plans; 1305 records, presumably a new national figure for work of this kind, testify as to the brand of patriotism in the Tarheel State.

The survey in itself was of a threefold character. It included household commodities, retail stocks, wholesale stocks, commodities grown on the farm and goods purchased in the usual way. The census statistics of the State were utilized in constructing the detailed plans. Of our population, 85.6 per cent. is rural and 14.4 per cent. is urban. Of our total population, 31.5 per cent. is negro. Each agent obligated himself and herself to visit at least 25 homes which would represent the most average and typical conditions in the county and to obtain 25 concrete records which would give the information desired.

As an indication of the complexity and difficulty which householders had to overcome in filling out reports may be cited this fact. Householders were asked to estimate, by trusting to memory, the amount of food purchased during the years 1916 and 1917, and by indi-

cating, from what they remembered of conditions, the correct amounts of food on hand in the pantry and in the storehouse for a given time during the years 1916 and 1917. These conditions were trying, and yet the State responded wonderfully and assisted by our agents the reports as correct as conditions of this kind would allow.

The most outstanding features of the survey are these:

1. It is only too obvious, according to the figures obtained, that in spite of all propaganda there is a marked decrease in the amount of poultry produced on our farms in 1917 as compared to 1916. In almost every instance the decrease is specific, and for the entire State the difference for the two years is about 25 per cent. This presumably is charged to the unusually high prices of grain and concentrates and to the inability of the farmer or backyard poultryman to grow poultry profitably under present conditions, unless he is in a position to produce his own feed.

2. While eggs and poultry have increased not more than 50 per cent. in comparison with normal prices at normal times, grains and concentrates have increased more than 200 per cent. The demand for eggs and poultry is higher than it ever has been before, and there ought to be a large and bountiful supply meeting this demand. Yet the farmer or poultryman who essays to produce poultry profitably without producing the necessary feed cannot do so and cannot take advantage of the best market for eggs and poultry that has ever been offered him. The solution of this discrepancy, therefore, lies first in educating the consumer that poultry and eggs, under present conditions, at present prices are not exorbitantly high, and secondly, that if it is possible to grow feed at home, poultry and eggs represent a profitable market for the producer.

3. On the other hand, the figures made possible by the food survey show that there has been an increase in the production of pork on our farms for the winter season of 1917-18 as compared to the winter season of 1916-17. This increase is State wide, and averages about 30 to 35 per cent. Responding patriotically to the demand of the Government for more livestock, and particularly more hogs, the farmers have utilized the best methods and the introduction of pastures in increasing their hogs. Unlike poultry and eggs, the price of pork has kept up with the price of grains and concentrates, and the farmer is assured of a good profit in growing hogs.

4. The production of beef has remained about the same, but the production of milk has fallen off considerably. The same reason which is responsible for the decrease in poultry and eggs is responsible for the decrease in milk production, namely, the lack of available grains and concentrates at reasonable prices. The retail price of milk has increased about 75 per cent. in the last year or two, while the price of grains and concentrates has gone up more than 200 per cent. Yet milk, like poultry, is always in demand, and it is the wise farmer who grows his silage and who has his pastures, who takes advantage of the great demand for milk by producing it at home and selling it.

5. The State has responded to the live-at-home campaign by showing again a material increase in the production of home vegetables, particularly the small home garden vegetables. It is very interesting to note that a great many families have stored for home use large quantities of fruits and vegetables during 1917, where they stored very little in 1916. This, of course, has been augmented by the canning of many vegetables, fruits and berries. Judging by the figures obtained and the impression conveyed through personal conferences and correspondence, the live-at-home campaign will be even more materially increased this year, and the State will be a veritable garden.

6. While it is difficult to say concretely in figures just how much of a decrease there has been in the purchase of commodities for the years 1916 and 1917, it is fairly well indicated that the decrease has been considerable. The difference has been made up in the greater production of commodities at home. People have been willing to use substitutes and have been very cheerful

about it. This stands out strikingly for sugar as an example. Thinking that the restriction on the use of sugar would be continued, syrup and molasses were produced in large quantities to take the place of sugar.

7. The survey showed no evidences of hoarding and the writer had no indications from the agents that there were any attempts to hoard last winter. The larders of the State were well provided with food for the year, judging from the amounts on hand on the date of the survey, and it is a trite saying, perhaps, but a very true one, that the cribs and smokehouses are full. They will be even more so this year. The storing of potatoes has been experimental with us in this State, but 1917 saw an increase in the construction of sweet potato storehouses and the amounts of potatoes stored as compared to 1916. This is a good thing, and one to be commended. Our folks have even tried to store cabbage and other truck, and have succeeded.

8. To our agents this survey has been very beneficial in giving them an introduction to the various homes in their counties in a very concrete and personal way. They have been enthusiastic about the work, and report that to the householders this survey has been very effective in bringing home the seriousness of the food and feed situation and the teachings of the Government and its agencies. Our agents tell us that the householders were extremely glad and willing to co-operate, and did so with a sense of patriotism. Undoubtedly this survey has proved to be a fine thing for those who have been asked to keep the records, because it has brought certain things to light concerning which people have not thought about a great deal.

At the time the survey was commenced there were many fictitious stories reported about the commandeering of food by the Government as a result of this investigation. Many of these stories were circulated about by German agents and spies, and were even too farcical for comment. The survey has banished these lies and fictitious rumors and has impressed every home thus canvassed with the fact that it is a contributing factor of the most patriotic sort in this present crisis.

It is difficult to see real blessing in the wake of any war, but it is a concrete fact that for the first time, perhaps, the people of North Carolina and of the United States, for that matter, have made an inventory of themselves as to the practice of economy, the utilization of substitutes, "the doing without" and the definite, practical determination of where we stand in the matter of complying with what the Government thinks best and desires.

Changes in Officials Announced.

Birmingham, Ala., May 27.—[Special.]—Several promotions in the official family of the Tennessee Coal, Iron & Railroad Co. and its subsidiaries, the Fairfield Steel Co. and the Chickasaw Shipbuilding Co., Mobile, have been announced by President George Gordon Crawford as follows:

Tennessee Coal, Iron & Railroad Co.—Mr. W. G. Mathias, general superintendent Ensley works, is appointed assistant to vice-president, with offices in the Brown-Marx Building. Mr. Karl Landgrebe, assistant general superintendent Ensley works, is appointed general superintendent Ensley works, succeeding Mr. Mathias. Mr. A. W. Allen, superintendent open-hearth furnaces, Ensley works, is appointed assistant general superintendent, Ensley works, succeeding Mr. Landgrebe.

Fairfield Steel Co.—Mr. C. J. Barr, general superintendent Fairfield works, is appointed assistant to vice-president, with offices in the Brown-Marx Building.

Mr. G. A. Miller, superintendent of mills, Fairfield works, is appointed general superintendent Fairfield works, succeeding Mr. Barr.

Chickasaw Shipbuilding Co.—Mr. C. J. Barr is appointed assistant to the vice-president, Chickasaw Shipbuilding Co., with offices in the Brown-Marx Building.

Graphite Mining in Texas.

Burnet, Tex., May 25.—[Special.]—The mining of graphite on an extensive scale has been resumed near here by the Southwestern Graphite Co. This company has made improvements, including the installation of a large mill for the treatment of graphite, at a cost of about \$300,000. Explorations conducted during the past two or three years are said to have demonstrated that graphite exists in large quantities. The output for the present at least will practically all be taken by the United States Government for use in war operations.

News and Views from Our Readers

Russia and Roosevelt—Patriotism Without Regard to Parties Should Rule the Nation's Acts.

CHAS. E. CHIDSEY, Pascagoula, Miss.

Regarding the letter of Mr. W. G. Counts, on page 64 of the May 23 issue of the MANUFACTURERS RECORD, wanting Mr. Roosevelt to be sent to Russia to restore that country into fighting activity, in which the writer says, "Surely the time has come to send Roosevelt there," I want to say, "Them's my sentiments."

Now, the friends of Mr. Roosevelt must not imagine that I am one of his flatterers. On the contrary, no one is more conscious of his faults than I am. His egotism, his impatience of control and his impetuosity are as apparent to me as they are to his worst enemy; but then, in opposition to these things, we must place his stupendous moral and intellectual force and withal his tireless physical energy.

Roosevelt is a man of stupendous genius and executive ability, and no one thing indicates his genius more than the clearness of vision by which he always recognizes things as they are. His vision has never been clouded by political passion or prejudice or interest. This faculty of clear vision is a gift that nature bestows upon few mortals. Caesar, Dante, Shakespeare and Napoleon are examples.

Now, when I compare the genius of the poets with that of the statesmen, I do it deliberately, and one familiar with the works of Dante and Shakespeare cannot fail to notice this clearness of vision, the absolute distinctness with which the facts of human life and the physical world around them stand out before them. Then, in studying the lives of Caesar and Napoleon, we will note the absolute distinctness with which the facts of human nature and the political world stand out before them. They saw human nature as it is and acted accordingly, never making the mistake of trying to transform human nature by reading it lectures and speeches full of moral platitudes and wordy nothingness, and withal is to be noted the extraordinary personal magnetism by which they bound men to them.

Caesar and Napoleon were men with tremendous faults, yet the England and the Europe of the Allies of today would never, perhaps, have come into existence had it not been for the genius and personality of these men.

Mr. Roosevelt has, as these men had, extraordinary executive ability and personality, and, I dare say, has faults as great as theirs were. Nature is never prodigal of miracles and a man that has great genius and is at the same time free from the frailties of human nature has not yet been found. Now and then the newspapers, in the fulsome adulation of some prominent man, slobber over and tell us about "the superman." If by superman or super-woman they mean one who has no thought of self, no ambition, but who gives his or her whole life unselfishly to humanity, I will say that during the history of the world there has been only one superman and one super-woman. The first was by the mob nailed to a cross and the second was burned at a stake.

By all means let Mr. Roosevelt be sent to Russia as the leader selected by the American people to be their leader in Russia to bring that nation back to itself and save it from the Hun. Mr. Roosevelt's spectacular career in Cuba, as President of the United States and as a hunter in Africa is one that will appeal strongly to the instinct of and love of the spectacular that lies deep in human nature. I dare say that there is no other American who is so well known in Russia as Mr. Roosevelt and no man who would, were he to go to that country, excite more interest and curiosity.

Human nature is so constituted that one to be a leader of men must appeal to their interest and arouse their enthusiasm by the spectacular. Does anyone familiar with the life and exploits of Caesar and Napoleon for a moment believe that these men would have accomplished the same result if they had left out the spectacular from their careers? An appeal to the spectacular instinct in man may be lacking in dignity, but, then, it is a psychological force that must not be despised. A grave, dignified and "goody-goody" professor of logic and moral philosophy may be the right man to teach the young idea how to shoot, but he is not the man to lead men to battle where the contest must be with iron and steel and not with words. The readers of the

MANUFACTURERS RECORD will recall to mind that it was Mr. Bryan's tinsel eloquence and his high-sounding phrase, "You shall not crucify mankind upon a cross of gold," that came near making him President of the United States and of completing the financial ruin of this nation. Mr. Roosevelt is also a maker of phrases, but his phrases when reduced to the final analysis are sound all the way through and are seemingly based upon a direct study of man, as I have never yet looked upon Mr. Roosevelt as a student of books. We must not forget that Mr. Roosevelt possesses one quality which as a leader of men in Russia at this day is absolutely essential, to wit: Physical as well as moral courage. That Mr. Roosevelt, when sent to Russia, might commit some follies follows as a matter of course, but his follies would be but a bagatelle in the great work he is capable of doing in arousing Russia and making of her once more a factor against the Hun.

Some months ago, while discussing the proposal of the MANUFACTURERS RECORD that Roosevelt be sent to France or Russia, a prominent Democrat answered: "We do not want to send Roosevelt over there, for as sure as we do he will be the next President of the United States." There you have the crux of the whole matter. A great statesman and a patriot in the hour of his country's greatest danger cannot find employment for his genius and talents on behalf of his country because it would be inexpedient politically!

The United States has lately started out on the work of sanitation in behalf of shipyard employes, and it now behooves the people of the United States to start a crusade for political sanitation, for everywhere the atmosphere is poisoned with the deadly miasma of "politics." The best brains of the nations must lie idle lest, per chance, their employment would not be advantageous to some politician.

If this nation is to win this war it must arouse itself to the fact that patriotism and the ability to do patriotic work is not to be gauged by past partisan service.

Now, Mr. Editor, in conclusion, do not for a moment think that this letter is intended to be an encomium of Mr. Roosevelt, as I have tried to state his faults as candidly as I have praised his virtues and ability. To me it is not a matter of the slightest importance as to who is or who is not the next nominee of the two great parties for President. Our task at present is to win this war, and to it we must devote all that is left of our lives.

Suggestion as to How to Get Increased Coal Production.

CHAS. W. HOWARD, Chattanooga Industrial Board, Chattanooga, Tenn.

In the days of trust and gentlemen's trade agreements a favored way of disposing of the small competitor was to reduce the price of a commodity to cost or less, thus killing off the ambitious little fellow, when automatically the price would stiffen.

The Fuel Director, according to Washington dispatches, will shortly reduce the price of coal at the mines, probably with the idea of boosting up railway net earnings. However praiseworthy their object, the result would be the same. A reduced output will as certainly follow as night follows day.

The Administration price for run-of-mine coal at the mines in Tennessee is \$3.10 per ton; the actual normal cost of digging a ton of coal in this State is not more than 40 per cent. of the total cost of producing it. Say that the operator gave to the miner 60 per cent. of Mr. Garfield's present price, and say that the miner produced no more than his yearly average of about 3½ tons per day, he would then have earned \$6.51 for a day's work. Now, compare this day's wage with that being paid to about the same class of labor at almost any point you may select at which Government work is being carried on, and see the inducement that the miner has to continue his work as against his more fortunate brother workman, whose place of abode is provided for him, his daily ration considered with great care, and his hours of labor even more favorably fixed than the average banker's.

The formula for increasing tonnage is as simple as making mud pies: Place no arbitrary price on the product of the coal mine. Mr. Garfield has or should have a maximum annual tonnage of every coal mine in

the United States. If he hasn't got it, he can get it. He can also get the territory that each one of these mines has normally supplied with coal. Let him say to these gentlemen, "You are going to be given cars to ship your maximum output, and you will market this coal in the territory you have heretofore supplied." It takes no diagram to illustrate what will follow. About all Mr. Garfield would need do would be to figure out the nearby lean territory to be supplied from the over-supplied territory.

Nearly everything else has been tried as an experiment. There is not a practical coal miner in the United States who will not unhesitatingly say that this course would bring about production and a trade adjustment of price. Right at the beginning the coal operator would profit, but the inexorable law of supply and demand would take care of it later on.

Organized to Further "Back to the Farm" Movement.

R. W. POLK, Secretary and Treasurer Polk Real Estate Co., Little Rock, Ark.

We have recently organized what is known as the Merchants' Land Association of America, the purpose of which is to encourage "back to the farm movement" and the raising of food products to assist in winning the war. This organization was started recently in San Antonio, Tex., and covers the United States and Canada in its scope. Mr. Geo. T. Larson of San Antonio is the official organizer, and the following are the officers:

President, R. W. Polk; secretary-treasurer, N. V. Dittinger; counsel, Frederick Reutzel; official organizer, George T. Larson; vice-presidents, Chas. L. Wheeler, Wm. H. Brown, L. A. Walch, E. N. Regua, H. C. Williamson, Thos. W. Jackson, S. A. Fishburn, Walter S. Adams, D. W. Hobson, Perry Morgan, F. C. Whitehouse, W. T. Dawson, E. H. White, R. W. Todd, S. V. R. Hayes, P. Sefton Schneidau, L. M. Harris, Claude Richards, A. J. Simonson, J. W. Kerr, Wm. A. Eastman, E. W. Kimber, R. A. Lancaster, Jr.

The intention of the organization is to get a large membership, possibly 5000, during the current year. We think an organization of this kind is worthy of mention. You will no doubt hear from it very much before the year is over.

Reclamation of Wet Lands Proposed Through Co-operation of Government

BILLS BEFORE CONGRESS WOULD LEND CREDIT OF NATION TO WORK OF BRINGING MILLIONS OF POTENTIALLY FERTILE ACRES INTO FOOD-PRODUCING AREAS—SUCCESS OF MOVEMENT EXPECTED WHEN FINANCIAL PRESSURE HAS SUBSIDED.

[Special Correspondence Manufacturers Record.]

Washington, D. C., May 25—[Special.]—Because it provides the credit of the nation to give whatever financial support may be necessary, the Chamberlain-Smith bill, designed to encourage the reclamation of arid lands, swamp lands and overflowed lands, would probably soon become a successful law were it not that the reclamation fund, which is to finance the improvements, would now be insufficient and the Treasury does not wish to use other resources, even temporarily, when so much money is demanded for expenses in connection with the war.

The manifest difficulty in carrying out such reclamation projects heretofore has been that the money required could be raised only upon security of the land's prospective value. Inasmuch as that value would vary with the success of the project, investors were reluctant to take the risk that the methods adopted might prove inadequate or that other obstacles might intervene to prevent the land from becoming a satisfactory collateral. Through the Chamberlain bill the nation is enlisted on behalf of those landowners who may form district associations in order to reclaim arid or water-logged tracts having potential value for agricultural purposes. Hence the proposed law, which was referred more than a year ago to the Senate Committee on Irrigation and Reclamation of Arid Lands, has met with no serious opposition, except for the revenue reasons already mentioned and the pressure of other business deemed more urgent at this time.

The Smith bill, introduced by Representative A. T. Smith of Idaho April 11, 1917, a few days after Senator Chamberlain of Oregon had offered his bill on the same subject, was modeled after the latter measure and is essentially the same. There is good authority for asserting that the Smith bill, in view of the reasons just

principal and interest on the certificates of indebtedness of the United States, and in order to avoid any danger of default in the payments on the certificates of indebtedness issued by the United States a reclamation guaranty fund is established by taking from the reclamation fund the sum of \$350,000 per annum until such guaranty fund reaches a total of \$10,000,000.

The bill provides for extending the reclamation of irrigable lands in the arid and semi-arid regions and also for the drainage and reclamation of water-logged lands in the same regions, as well as for drainage in other parts of the country.

Under the plan proposed these results would doubtless be accomplished without drawing upon the public funds, aside from the reclamation fund, which, as heretofore mentioned, is "revolving" and does not arise from an appropriation.

There would be little likelihood of default in the payment of the principal and interest on the district bonds upon which the certificates of indebtedness are based, inasmuch as the works would be constructed by the United States and paid for at cost by the beneficiaries, who would doubtless be able to meet the comparatively light charges on account of the long-time bonds to be issued by the districts. For the same reasons the investing public would have confidence in the feasibility and success of the plan, so that it is fair to assume that the certificates of indebtedness would be freely purchased by investors.

Eventually, it is thought, as has been mentioned, more than one-half of the swamp and overflowed lands throughout the United States will be reclaimed. Of such lands there are, according to estimates by the Reclamation Service, about 74,000,000 acres in the United States proper.

The total acreage is thus classified:

	Acres.
Permanent Swamp—lands which are permanently wet and are never fit for cultivation, even during the most favorable years; and which do not afford profitable grazing for livestock.....	50,000,000
Not Grazing Lands—lands which afford pasturage for livestock, though the forage they produce may be of inferior quality.....	6,000,000
Periodically Overflowed—lands which, in their natural condition, are subject to periodical overflow by streams, but which at other times produce valuable crops....	14,000,000
Periodically Swampy—lands which, during seasons of light or medium rainfall, will yield valuable crops, but which are wholly unproductive during seasons characterized by rainfall greater than normal.....	4,000,000
Total	74,000,000

Although the 15 Southern States include something more than two-thirds of all the swamp lands in the nation—that is, 51,194,500 acres out of 74,541,700 acres—such lands in various Northern States are more extensive than is generally surmised.

It is true that the first four States, if one gives preference to those having the most swamp land, respectively, are Southern States—Florida, with 18,560,000 acres; Louisiana, 9,600,000 acres; Mississippi, 6,173,000 acres, and Arkansas, 5,760,000 acres. But the next five States in order are Northern Commonwealths—Minnesota, with 4,500,000 acres; Michigan, 4,400,000 acres, and Illinois, 2,688,000 acres. Minnesota and also Michigan have more swamp land than both the Carolinas, and either Minnesota or Michigan has nearly as much swamp land as may be found in Georgia. Only seven States—all in the Far West, where irrigation is most needed—have no swamp lands whatever. These States are Arizona, Colorado, Idaho, Montana, Nevada, New Mexico and Utah.

The swamp lands in 15 Southern States are as follows:

	Acres.
Alabama	1,120,000
Arkansas	5,760,000
Florida	18,560,000
Georgia	2,400,000
Kentucky	224,000
Louisiana	9,600,000
Mississippi	6,173,000
Montana	356,000

Mississippi	6,173,000
North Carolina	2,400,000
Oklahoma	35,000
South Carolina	1,700,000
Tennessee	800,000
Texas	1,620,000
Virginia	384,000
West Virginia	250,000
Total	51,194,500

Twenty-six Northern States have swamp lands, as follows:

	Acres.
California	1,850,000
Connecticut	37,700
Delaware	200,000
Illinois	2,688,000
Indiana	1,000,000
Iowa	830,000
Kansas	160,000
Maine	240,000
Massachusetts	138,700
Michigan	4,400,000
Minnesota	4,500,000
Missouri	1,920,000
Nebraska	256,000
New Hampshire	43,000
New Jersey	601,500
New York	576,000
North Dakota	276,000
Ohio	500,000
Oregon	96,000
Pennsylvania	17,500
Rhode Island	23,000
South Dakota	70,000
Vermont	75,000
Washington	2,500,000
Wisconsin	356,000
Wyoming	356,000
Total	23,347,500

LYLES WOOD CHEMICAL PLANT.

Progressing Rapidly With \$1,300,000 Tennessee Factory to Supply Government.

Such rapid progress has been made with the construction of the \$1,300,000 wood chemical plant at Lyles, Tenn., that the entire establishment is expected to be ready for operation, affording employment to 1000 men, by December 1, which will be one month in advance of date specified by contracts. About 250 men are at work on the 18-acre site, and every day this big force of employees is being increased.

The Bon Air Coal & Iron Corporation of Nashville is building this plant in accordance with a contract to supply the Government with materials for explosives manufacturing. Each day the completed factory will produce from 2000 to 3000 gallons of wood alcohol, 40,000 pounds of acetate of lime and 10,000 bushels of charcoal. All the alcohol and acetate of lime will be taken by the Government for the purpose of manufacturing explosives, while the output of charcoal will be burned in the Bon Air Coal & Iron Co.'s iron furnace. This furnace will be blown in with a daily capacity of from 75 to 100 tons of charcoal iron after the completion of the \$150,000 improvements now progressing in accordance with the plan heretofore announced.

About \$800,000 is the cost of the construction involved and \$500,000 the cost of the plant machinery for the chemical plant. The main retort building will be of brick, steel and corrugated iron, 350 feet long by 80 feet wide. Other buildings are the office, dormitories, mess halls, 20-room hotel and 200 dwellings, all completed or under construction.

All chemical apparatus is being installed by the E. B. Badger & Sons Company of Boston, Harry C. Merriam being the chemical engineer in charge. The George A. Fuller Company of New York is the general construction contractor.

Materials for erecting the buildings and for supplying the 200 cords of wood to be burned daily in the plant are being cut on the Bon Air company's 130,000 acres of virgin hardwood timber. A 1½-mile branch railway is carrying the materials reaching the plant by way of the Nashville, Chattanooga & St. Louis Railway, which company is planning to enlarge its terminals and provide additional trackage for 50 to 60 cars at Lyles.

Eggs in Cold Storage.

The United States Bureau of Markets, Washington, reports from 439 cold storages show that their rooms now contain 4,130,728 cases of eggs, while on May 1, 461 storages reported 2,935,362 cases. The 419 storages that reported holdings on May 15 of this year and last show a present stock of 4,098,121 cases, as compared with 3,436,216 cases last year, an increase of 661,905 cases, or 19.3 per cent. The reports show that since May 1 the May 1 holdings increased 43.3 per cent., while last reports showed that during April the April 1 holdings increased 738.9 per cent. Last year the increase from May 1 to May 15 was 70.3 per cent., and during April the increase was 997.9 per cent.

Negro Boys' and Girls' Club Work in North Carolina

By F. H. JETER, Raleigh, N. C.

Educationally, socially and financially the work with the negro club boys and girls in North Carolina has exerted a more wonderful influence over the colored people of the State than any other one phase of the work being done with these people by the Agricultural Extension Service. The year 1918 is the third in which this work has been done with the negroes, and since its inception they have seemed to become more and more interested each year. This is proven by the fact that applications for membership in the clubs are being received by the hundred each day. In fact, it seems that the enrollment during the present year will greatly exceed the combined enrollment of the two previous years.

The purpose and aim of the work among the colored children of the State is to do the same thing that is being done for the whites, that is, to train the boys and girls of the farms, to teach them modern methods of profitable farming. The effect of the work has been admirable both upon the adults as well as the children. Here is where the educational effect of the work is shown.

Not many negroes in North Carolina can read and write, and the bulk of these will never learn anything in regard to profitable farming unless they are taught by word of mouth or see it demonstrated. Some few of them can read papers and bulletins and get some ideas as to better farming methods, but when they see their boy or girl take a few hens, and, by following improved methods, handle them to better advantage and clear more actual cash from them than does their mother with twice the number, or the boy, a pig from the same litter as his father's, and have one which outweighs his at killing time; or take an acre of corn and under the same conditions make from five to ten times as much as his father at less expense, it causes both the parents and neighbors to stop and think about these things. To them these results speak more clearly for themselves than anything which could be put down on paper. It is like a proposition in geometry which teaches that things equal to the same things are equal to each other. In a number of cases it has been found that even the most backward farmers are convinced without further demonstration. This is one of the most effective methods of agricultural education that has yet been tried among the negroes.

Another good thing which this club work has done, according to John D. Wray, the negro agent in charge for the Agricultural Extension Service, is to cause the negro farmers to change their old crude way of doing things and teach more modern methods in all phases of their farming. Results show that their yields have been greatly increased as a result of this. The work has clearly shown them the folly of cultivating a great area and obtain nothing, practically, for their labor. Because of this, in every community where there are large settlements of negroes they have called on the Extension Service for demonstration work faster than suitable men can be found to take it up.

One other beneficial feature about the club work as conducted during the past two years, as shown with the boys and girls who are now members of some one of the various clubs is that they will later on become teachers in the negro public schools of the State and will aid in molding new sentiments for country life, checking large migration to the city. It is predicted that their influence will be felt among the farmers of the community as well as the children of the schoolroom, and this is one of the most admirable benefits which will accrue from this work.

From a social standpoint, a bringing together from time to time of the farmers and their families is a great stimulus for exchanging ideas and learn the advantage of co-operation. They are beginning to see that they cannot live alone successfully and that the interest of one is for the good of all. The result of this has been the development of many co-operative movements which are bringing about untold benefits to the rural communities where they have been started. Even the preachers are beginning to realize the good effect of the work in connection with their churches, and their associations, conferences and other religious bodies have thrown open their doors to the work, making it possible for large

numbers to be reached, which, under other conditions, would have been impossible.

Whether or not the work is remunerative can be seen from the fact that improved farming is now in evidence in all the larger negro communities. New homes are being built, new barns constructed, improved farm machinery has been put in, pure-bred livestock bought, the old dilapidated schoolhouses and churches have been replaced with new ones.

During the years 1916-17, 3398 members have been enrolled in the various phases of the negro club work. In the negro poultry club work the members have reported 9492 eggs laid, 5427 set, 4511 hatched, 4015 chicks raised. The market value of these at the time reported amounted to \$2293. During the same two years the boys produced 25,934 bushels of corn, valued at approximately \$40,000. Nine boys made between 100 and 125 bushels; 8, between 90 and 100; 12, between 80 and 90; 12, between 75 and 80; 34, between 60 and 75; 60, between 50 and 60, and 36, between 40 and 50 bushels.

During the two years the work has been under way the agent has held 198 conferences, wrote 49 circular letters, mailed 58,200 letters, 7558 official cards, 8904 bulletins, wrote 29 articles for the newspapers, 4984 personal letters, traveled 25,000 miles, held 226 meetings and addressed 94,874 people. For this work the Government has spent about \$3000. Total value of products reported, \$42,293. The net income to the State is \$39,293 for the two years' work. Only about one-third of the members reported. This does not include the effect upon the adult farmers, who claim that by reason of the club work they have increased their agricultural production along all lines. This is the result of the general stimulus caused by the momentum of this great movement.

Nearly 2,000,000 Tons of Coal Now Mined Daily.

In its weekly report on the production of bituminous coal, the Geological Survey states that a slump in loading on Saturday, after a good five-day performance, caused production during the week ended May 18 to decline slightly. The total production of soft coal (including lignite and coal made into coke) during the week of the 18th is estimated at 11,732,000 net tons, an average daily production of 1,955,000 net tons, compared with 1,971,000 net tons during the week of May 11.

Beehive coke production during the week ended May 18 is estimated at 678,000 net tons, an increase over the preceding week of 10,000 net tons, or 1.5 per cent. The average production per working day amounted to 113,000 net tons, compared with 111,000 during the week of May 11.

Anthracite shipments were reported as 41,011 cars during the week of the 18th, an increase over the week previous of 2244 cars, or 6 per cent.

For the country as a whole the ratio of production to capacity during the week ended May 11 was 76.6 per cent., the highest point attained this year. The improvement is attributed entirely to an increased supply of coal cars.

Improved working conditions were reported by operators in the Southern Ohio, New River and Winding Gulf fields of West Virginia, high volatile fields of West Virginia, Cumberland and Piedmont district and Hazard (Ky.) fields. Improved transportation conditions brought about the increased production in all fields stated with exception of Southern Ohio.

Northern and Central Ohio and Southern Appalachian operators report a decrease in production and attribute the loss to lack of coal cars.

Production of beehive coke in the Connellsville and adjacent regions declined slightly during the week ended May 18. The principal operators located in the Connellsville, Greensburg and Latrobe districts reported production of 318,605 net tons, or 69.2 per cent. of their maximum capacity, compared with 70.7 per cent. during the preceding week. The operators reporting had a 100 per cent. car supply during the past week, and losses attributed to yard labor shortage declined from 19.4

per cent. during the week of May 11 to 14.4 per cent. Losses in potential capacity due to causes not reported, however, increased from 2.8 per cent. to 16.4 per cent.

The same operators produced 129,950 net tons of coal.

During the past 10 weeks operating conditions in the by-product coke industry have exhibited very little change. The ratio of production to maximum capacity rose from 87.5 per cent. in March to 89.6 per cent. on May 4, the maximum performance since the weekly statistics on by-product coke were begun. Since that date the ratio declined to 89.2 per cent. the week ended May 11 and rose to 89.3 per cent. during the week of the 18th.

Out of total losses of capacity of 10.7 per cent. during the week of May 18, 2.7 per cent. was due to lack of coal, 2.0 per cent. to labor trouble, 4.8 per cent. to repairs to plant, 0.3 per cent. to "no market" and 0.9 per cent. to all other causes.

Material improvement, made possible by repaired plants, was reported by operators of New York State, the ratio of production to maximum capacity rising from 88.3 per cent. during the week ended May 11 to 93.7 per cent. Less favorable conditions, however, were reported by the operators of Alabama and West Virginia. In the former State the producing ratio declined from 91.1 per cent. to 88.3 per cent., and in latter State from 97 per cent. to 92.8 per cent., the decline in both States being due to repairs to plants.

Minnesota alone continues to report loss of capacity due to "no market."

Great Food Crops and Much Livestock Being Raised in Mississippi.

Jackson, Miss., May 25—[Special.]—Mississippi farmers have responded to the call of the Government for more food and feed crops, and have planted the largest acreages of corn, velvet and soy beans, peas and peanuts in the history of the State—even larger than in 1917, when the State broke all records for producing things to eat.

Not only will the corn and legumes crops be huge, but the hog yield will be about double that of last year, and there has been a corresponding increase in cattle. From South Mississippi come reports of the revival of the sheep-breeding industry, despite failure of the recent Legislature to protect it by passing the anti-cur law.

District agricultural agents have turned in the reports of the crops planted in the various sections of the State, and if seasons are anything like so favorable this year as last, Mississippi's food production will open the eyes of the nation.

Last year the State proved the right to rank with the best of the Middle Western Commonwealths when it raised something like 100,000,000 bushels of corn and shipped hundreds of carloads of hogs, cattle, sorghum, peanuts, chickens and other farm products to the larger markets of the nation.

All fears that the Delta section had gone "cotton-wild" and had forgotten its duty to the nation in the way of producing foods have been set at rest. The cotton acreage has been slightly increased, but there has been a much greater increase in the corn and beans acreage, and the wealthy planters of that territory, the richest in the State, are going in for hog-raising on a large scale.

For instance, Yazoo county, which is partly in the Delta, shipped \$30,000 worth of hogs in 1916, \$101,000 worth in 1917 and more than \$100,000 worth in the first four months of 1918, with prospects that the total shipments for the year will reach \$250,000.

One encouraging feature of the reports of district agents is that practically every acre of corn in the State is planted to velvet or soy beans. In South Mississippi reports show that 90 per cent. of the corn acreage has been sown to velvet beans, and hardly 1 per cent. is without a legume of some kind.

In North Mississippi velvet beans have been bought by the carload for seed, even after the early crop was killed by late cold weather. The soy-bean crop is reported to be 100 per cent. greater in North Mississippi this year than last, with a corresponding increase in peanuts.

The State is producing just at this time the largest potato crop in its history, the early harvest being especially fine as to quality. A market threatened with glut has hurt prices somewhat, and a few of the farmers are feeding the potatoes to hogs, but thousands of bushels are being stored and thousands more marketed.

It looks now as if the State is not only going to do its bit nobly for the Government, but also to enjoy the same sort of unbounded prosperity it knew last year.

"TO WAR, WORK OR JAIL."

Alternatives That Confront Every Able-Bodied Male in Mississippi.

Jackson, Miss., May 24—[Special.]—Go to war, work or jail is the slogan of a State-wide campaign that has begun in Mississippi to rid the State of labor slackers.

Faced with the probability of having to shut down many industries, and of a serious cutting down in food crops, the State has aroused itself, and with the assistance of the employment bureau of the Federal Department of Labor, has set about putting every able-bodied person at some profitable task.

E. D. Self of Meridian, State director under the Federal employment bureau, has held a series of conferences in the past few weeks and is planning to begin at once a crusade against idlers or strong, able-bodied men who are engaged in work not essential to winning the war.

Governor Bilbo has issued a proclamation calling upon county and city officers to wage war again vagrancy, and not to let any person spend his time in idleness if physically able to do a day's work.

Mr. Self will seek especially to divert men from such jobs as driving automobiles for the wealthy to positions as farm laborers, and a campaign in this direction has already been started by the newspapers of the State.

The labor situation is critical. A short time ago one of the leading lumbermen of the State remarked that he did not know a mill in the State that is running to capacity. Women are being used in many industrial plants and proving moderately successful, but their numbers are limited, and certain classes of work are unsuited to them.

Some industries have resorted to the use of negro lads. They report this sort of labor far from satisfactory.

A great deal of complaint has been heard from the rural districts, where the farmers are trying to raise food and feed crops, that negroes are engaged in tasks in the cities which are wholly non-essential and should be released at once.

Negro sections of the larger cities, too, are thronged with strong young men who never seem to work, but they won't be so crowded much longer, officers say.

Chiefs of police in these cities have declared war on the vagrants, and even before the Governor's proclamation appeared insisting that officers put the idle to work, police courts were listening to excuses offered by persons who object to toiling on conscientious grounds.

Many men in the Mississippi units at Camp Beauregard, La., have come home in the past few weeks to help in planting and cultivating the crops, and leaders in the crusade against the slackers declare it is a disgrace to take these soldiers from their training when the State has plenty of men to do its work if they could only be made to undertake it.

The campaign will be assisted by sermons from every pulpit in the State, and motion-picture theaters will carry slides bearing the slogan, "Go to war, work or jail."

Optimistic Report on Sugar-Cane Outlook in Louisiana—Great Possibilities for Cane Growing in Florida.

New Orleans, La., May 24—[Special.]—The cane crop is fully 10 per cent. ahead of the 1917 crop at this time. The corn crop, which is an adjunct to cane culture on sugar plantations in Louisiana, is the best and largest that this State has ever seen. The writer has just returned from a trip through the cane parishes. The area in oats to be observed in all parts of the sugar belt is more than surprising. Along the storied Teche extensive golden brown oat fields are frequently to be seen in the center of waving green expanses of cane and corn. This was not so in other years, and is a remarkable evidence of the progress made in Louisiana along varied foodstuff lines. Often, too, one is astonished by the large areas of sugar lands in garden truck. In some cases a large patch of truck will be observed surrounded by some of the most excellent sugar-cane the writer has ever seen here. Even the strips of land along the railroad rights of way which in other years ran wild with weeds are cultivated.

The air is full of enthusiasm and optimism. There is a very much larger percentage of colored women working in the fields, and present signs indicate that the colored women of sugar Louisiana are going to offer the best solution of the serious field labor problem. Colored

women are being paid \$1.25 a day and men \$1.50 a day at present, in addition to which they are given the free use of a house, together with such land and implements as are needed for the production of their own foodstuffs. Some planters are supplementing these offers with bonuses paid at regular times. Further wage increases will be made, but gradually.

In the manufacturing end of the business the scarcity of skilled labor is also very much noticed. Many men out of the draft age are leaving chief engineerings and managements and taking shipbuilding and other war positions.

To aid the International Sugar Committee to formulate the proper price schedule for Louisiana sugars, the American Cane Growers' Association is compiling data on the increased cost of producing cane and manufacturing sugar in Louisiana. Reports on these points have been received from practically every sugar factory in the State. They will be forwarded to Chairman Rolph shortly. The increase in the cost of sugar-making in Louisiana now is around 40 per cent. Daily advances in the cost of items used in sugar manufacturing here will certainly bring this percentage of increase up to more than 50 per cent. before the next grinding.

The acreage in velvet beans in the sugar parishes is rapidly and substantially increasing. This arises from the adoption of the four-year crop-rotation system by the sugar producers. This system works out in this wise: two years in cane followed by two in corn and some legume plant.

Spineless cactus has failed as a stock food crop in Louisiana. The cactus produced was large and it grew well, but it analyzed 93.13 per cent. water and only 6.87 per cent. dry matter. The same weight of lespedeza or alfalfa has ten times the food value.

Another old factory out of business since 1913 is back in the 1918 list. Golden Ranch, in the Lafourche delta, is being renovated for operation the coming season. J. H. Legarde of Lockport, La., is the general manager of the new operating company.

The grading and standardization of Louisiana sugar is provided for by an appropriation of \$20,000 by Congress for this purpose. The experiments will be conducted by the United States Bureau of Standards.

All factories are busy making their own barrels now. Some have installed barrel-making machinery, while the others are making them by hand.

Several Louisiana sugar planters recently returned from South Florida, where they investigated the cane possibilities of that place. Jules M. Burguières, of the very prominent Louisiana sugar family of Burguières, has been experimenting with sugar-cane on a 100-acre tract at his home, West Palm Beach, Florida. He has been making syrup from the cane raised. He says that the possibilities for cane culture there are great. He says that the cane produced is high in sugar content, and that the yields per acre are heavy. Also freezes are infrequent in South Florida.

Southern Pig-Iron Market Designated as Quiet

Birmingham, Ala., May 27—[Special.]—Still marking time, strictly adhering to Government regulations in the way of priority shipping orders and other things, the Southern pig-iron market might simply be designated as being quiet. Shipping is on the increase—that is, a greater quantity of iron is reported moved out every week. The Middle West is rapidly catching up on its business, while consumers in other directions are being accommodated right along. There is need for iron right now and the consumers everywhere are anxious to get what is coming to them. Attention is still being given to production in the South, with a little success, though it is not claimed that May will show up the expected record output that was outlined 60 days ago. As with the coal, ore and coke producers, iron and steel interests have something to say of the scarcity and inefficiency of labor. Estimates are made that but little iron is yet to be had for the first half of the year, and not more than 40 per cent. of the probable make is being discussed so far as the second half of the year is concerned. However, the principal effort in the Birmingham district is toward production of iron and steel, keeping plants in shape and development work going and shipments steady.

Foundries and machine shops and other consuming plants in the district are still very active, but the melt of iron at home lags as long as the cast-iron pipe plants do not operate to capacity. Some of the pipe plants have completed remodeling so that some foundry work can be done. The destruction of the pattern shop and

storehouse of the Birmingham Machine & Foundry Co. plant during the past week was a serious loss, some very costly patterns being destroyed, some of them, perhaps, never to be replaced. The cause of the fire is being investigated. Rebuilding has started and the main part of the plant is in full operation, much Government work still being in hand.

The rebuilding of the Steel Cities Chemical Co. plant at Fairfield, destroyed by fire last week, has started, and within a few weeks it is expected that sulphuric acid for the steel-working plants may again be produced in quantity. In the meantime the acid is being brought in from other points, being furnished by fertilizer plants of the district.

All development work in the Birmingham district is showing steady progress.

There is but little market for scrap-iron and steel. Stocks are still dwindling and general uncertainty prevails in the industry. There is very little demand for old material and a change for the better is not looked for in the near future. It is possible that when the Government revision of the pig-iron and steel market is made again next month there may be a change in the scrap market, but dealers in old material say that their business is the first to feel the effects of a cut and the last to see improvement. Local consumers of scrap-iron and steel do not appear anxious to prepare for future needs, though every effort is being strained toward a larger output at steel works and foundries and machine shops.

Pig-iron and old material quotations are given as follows:

PIG-IRON.

No. 2 foundry, \$33.50 f. o. b. furnaces.
(Basic iron, \$32; revision by Government to be announced again by July 1, 1918; differentials on pig-iron the same as before Government regulations began.)

OLD MATERIAL.

Old steel axes.....	\$30.00 to \$32.00
Old steel rails.....	24.00 to 25.00
Heavy melting steel.....	23.00 to 25.00
No. 1 railroad wrought.....	25.00 to 26.00
No. 1 cast.....	25.00 to 26.00
Stove plate.....	20.00 to 22.00
Old car wheels.....	25.00 to 27.00
Tramcar wheels.....	21.50 to 24.00
Machine-shop turnings.....	17.00 to 17.50
Cast-iron borings.....	12.00 to 12.50

BOILER WORKS TO COST \$4,000,000.

Government Plans to Manufacture Steamship Boilers on Riverfront at Richmond.

All Government steamships constructed in shipyards along the Atlantic coast will be equipped with boilers to be manufactured in a \$4,000,000 plant which the Government will establish at Richmond, Va. This announcement reports that Director-General Schwab of the Emergency Fleet Corporation states the plant will be the largest boiler works in America.

The Newport News Shipbuilding & Drydock Co. of Newport News will build this boiler works for the Emergency Fleet Corporation and operate it after completion, 2000 skilled mechanics to be then employed. In the construction and equipment of the plant there will be required 1500 men, and the plant is expected to be producing steam boilers for ships before the close of this year. A site will be selected on the James River, so that transportation facilities by water will be available for shipping the boilers to the various shipyards where the new vessels will be equipped with their mechanical installations.

This big boiler plant will include a foundry, a machine shop and a boiler shop, with electric lighting and power. Its cost will be furnished by the Emergency Fleet Corporation, and the Newport News Shipbuilding & Drydock Co. will have the general supervision of constructing it.

Huge Orders for Southern Pine to Build Cars.

An echo of the recently placed order of the Federal Railroad Administration for 100,000 cars is found in a letter received by the MANUFACTURERS RECORD from the Southern Pine Association, New Orleans, saying:

"Yesterday the American Car & Foundry Co. had representatives in New Orleans conferring with our Emergency Bureau relative to placing an order for 85,000,000 feet of Southern pine with our mills through the bureau. The car company is busy getting up the specifications for another order of 200,000,000 feet. In fact, we hear of so many big Southern pine orders being gotten into shape for placement that it makes us dizzy."

Furthermore, the same letter says that it isn't a question of the mills getting business nowadays; the job is to find an order for lumber which looks good to the mills, and this state of affairs promises to continue.

Big Picric Acid Plants for South

\$7,000,000 OUTLAY AT BRUNSWICK AND \$12,000,000 REPORTED FOR LITTLE ROCK—OTHER IMPORTANT OPERATIONS UNDER WAY

[Special Correspondence Manufacturers Record.]

The War Department has decided to locate the first Government-controlled picric acid plants at Little Rock, Ark., and Brunswick, Ga.

Officers of the Ordnance Department, after a careful study of conditions throughout the country, have decided that the South offers the best facilities for housing the most abundant supply of labor and the least congested transportation lines of any section available for the acid plants. Moreover, the sites selected are deemed admirable from a strategical standpoint, Brunswick being now one of the principal points for overseas shipments and Little Rock having the advantages to be derived from a situation at a safe distance from the seaboard. Government officials have realized that it is no longer judicious to place all the munition plants along the coast, and in consequence inland sites are receiving more consideration than at any previous time.

For military reasons the Ordnance Department has disclosed but few details in regard to the picric acid plants, but contracts have been awarded and it is understood that construction work will be rushed.

At Little Rock the War Department has taken over a number of buildings already on the site, and will use them as part of the plant. In addition, materials and workmen for the new construction work are now on the ground, and it is believed that the plant will be operating by September.

Reports from Little Rock say that the plant to be built there and the houses needed will cost probably \$12,000,000, while \$7,000,000 is reported from Brunswick as the outlay at that point.

The Little Rock plant will be built by the War Department, and the general contract has been awarded to the Pratt Engineering & Machinery Co. of New York. It will produce picric acid for the manufacture of explosives and employ 4000 men when in operation after it is completed. The plant site is a 1600-acre tract, and the principal factory building will be 500 feet long by 100 feet wide, in which will be installed the equipment of machinery for manufacturing picric acid and the several ingredients (sulphuric acid, nitric acid and phenol) of which this chemical is composed. Plans and

specifications have been prepared by the Pratt corporation's engineers, who will employ 2500 men during the construction of the plant. All the chemical manufacturing equipment will be furnished by the Everly M. Davis Chemical Construction Co. of New York, which has engineers at Little Rock to give attention to the preliminary details for this work.

The Brunswick plant will be located on Turtle Island, in Turtle River, near Brunswick, and the general contract for building, equipping and operating it has been arranged by the War Department with the Butterworth-Judson Corporation of New York, which owns and operates similar plants in Massachusetts, New Jersey and Maryland. In order to provide housing and public utilities for this \$5,000,000 manufactory there will be expended a total of \$2,000,000 for land, buildings, water supply, sewer system, electric lighting equipment, sidewalks, streets, etc., for a complete industrial town with all modern conveniences. During the building of the plant about 5000 men will be employed. Fourteen hundred acres of land have been acquired for the industrial city and the plant, the latter to have buildings covering an area of about five acres.

Meanwhile a large contract for picric acid is expected to be placed with the Federal Dye & Chemical Co. of Kingsport, Tenn. This plant has been closed down because of internal difficulties, but the courts have recently authorized expenditures which will put it in operation again so that work on the Government acid contracts can be expedited.

Contracts for the building of additional nitrate plants by the War Department will be let at an early date. It is understood that these will be located in Ohio, one near Cincinnati, and the other in the neighborhood of Toledo. It is said by officials that the erection of these plants will not interfere in any way with plans for nitrate plants in Tennessee, but merely represent the necessary expansion to meet the war needs. The department is fully alive to the opportunities offered by the South in its natural advantages and industrial possibilities, and will utilize them whenever possible.

Organized Work by Bankers in Behalf of Agriculture and Stock Raising.

Corpus Christi, Tex., May 23.—[Special.]—Joseph Hirsch, chairman of the Agricultural Commission of the American Bankers' Association, recently returned to his home in this city from an executive committee meeting of the organization.

The work of the Agricultural Commission during the past year has been of especial value to the Government and has elicited the warmest appreciation of the Secretary of Agriculture and the National Food Administrator. The commission has been the means of establishing bankers' committees on agriculture in 42 States. These committees work in the closest touch with the Department of Agriculture, and have been of special value in helping to place Government demonstration agents in over 2000 counties of the Union. Bankers have been active in the development of the livestock industry, and during the past year the commission worked in close conjunction with the Bureau of Animal Industry in its war campaign for increased swine production. Thousands of bankers have organized swine clubs, sheep, dairy cattle, calf, poultry and other clubs. Bankers have been especially active in organizing this work among the children of America. Bankers have assisted in bringing pure-bred seed into their communities; have helped in organizing marketing associations and in many other ways.

The agricultural Commission, under the leadership of Chairman Hirsch, publishes a monthly illustrated journal, "The Banker-Farmer," which reaches over 30,000 bankers and farmers every month. Its work marks a new era in the banking world, and aside from its value in the financial development of the country, it has performed a great public and patriotic service.

Proposed Legislation to Encourage Increased Production of Ores and Minerals.

Washington, D. C., May 24.—[Special.]—Hearings have been held recently by the Senate Committee on Mines and Mining as to the merits of the Foster bill "to provide further for the national defense and security by encouraging the production, conserving the supply and controlling the distribution of those ores, metals and minerals which have formerly been largely imported or of which there is or may be an inadequate supply."

Representative Foster of Illinois introduced the bill April 6 of this year. The House Committee on Mines and Mining, to which the measure was referred, held "extensive hearings" and made a favorable report April 15. Debate upon the bill started in the House April 23. The act was passed a week later. May 2 it reached the Senate committee, which will probably return it to the Senate with a favorable report some time before the end of the month.

The need of this legislation has been urged by various executive officers of the Government. Prominent mining men from all parts of the country have expressed to the House and the Senate committees agreement with the intent and the general character of the bill. Most of the criticism against it has been directed at the details and the form of the proposed enactment.

Summing up objections to the bill in its present form, a member of the Senate Mining Committee said to the MANUFACTURERS RECORD correspondent:

"Several of the products named, such as manganese, would no doubt be obtained in the United States during the war to any extent desired, even if no special legislation were adopted. Perhaps it is injudicious to put such products under the suggested regulations.

"But I am inclined to think that the most serious error was made in drafting the act so closely after the

food and fuel control act of August, 1917. That is, the control of minerals, metals and ores recommended is too detailed and minute. When the bill gets before the Senate I fear that the same Senators who found fault with the provisions of the food and fuel act will renew their demand for a measure characterized to a greater degree by directness and simplicity."

But, as has been mentioned, there is no dispute as to the need of a law placing the production of minerals, metals and ores under direct control of the Government during the war. The Secretary of the Interior strongly advised the passage of such a law at the earliest possible date. The Director of the Geological Survey submitted to the House committee a statement indicating to what extent the production of particular minerals should be stimulated. The Director of the Bureau of Mines said that, if proper steps were taken, a sufficient amount of the necessary metals and minerals could be secured in the United States for war purposes. A representative of the Shipping Board asserted that, by producing various metals and minerals in this country, instead of importing them, from 300,000 to 400,000 deadweight tons of shipping would be relieved for use in transporting troops and supplies. Bernard M. Baruch, chairman of the War Industries Board, emphatically approved the bill and recommended its immediate passage. And the State geologists in many sections have contributed their approval of the measure.

A Possible Revolution in Brass-Making.

Washington, D. C., May 30.—[Special.]—The Bureau of Mines today announced the perfection of a type of electric melting furnace that may be revolutionary in the making of brass. Patents on this furnace, known as the Rocking electric furnace, have been taken out by the bureau and have been assigned to Secretary of the Interior Lane as trustee. Free licenses to operate these furnaces under the patents, it is understood, can be obtained by making application through Van H. Manning, Director of the Bureau of Mines.

The new furnace, which it is claimed will reduce the important losses in brass melting, is the result of five years' experimentation by H. W. Gillett, chemist of the Bureau of Mines, in co-operation with the laboratory of Cornell University, the American Institute of Metals, and a number of manufacturers of brass.

Up to the present most brass has been made in costly crucibles of imported clay and graphite. Since the war it has been impossible to obtain the imported materials for crucibles, and manufacturers have had to put up with crucibles of much poorer quality, and at a cost many times that of pre-war prices. With the huge tonnage of brass needed for war purposes, such as shells for cartridges, manufacturers have been anxious for a solution of the crucible problem. The bureau states it is inevitable that the next few years will see electric furnaces largely replacing crucible furnaces and that there will be a development comparable to that seen in the steel industry in the last few years. The electric furnace, it is also declared, will greatly decrease the loss of zinc, which, together with copper, makes brass. Zinc boils at a much lower temperature than copper, and there have consequently been large losses in the open crucible furnace through volatilization of the zinc. The electric furnace is closed, and these losses are avoided. It is estimated that the unnecessary losses in brass-making are more than \$3,000,000 a year in normal times, and perhaps \$10,000,000 a year in war times. Another claim for the electric furnace is that it gives more healthful working conditions for the men.

The Michigan Smelting & Refining Co., Detroit, Mich., already has one of these furnaces in operation and has four more under construction. The C. B. Bohn Foundry Co. of Detroit is building two of these furnaces.

Farmers of Texas Using Increased Number of Automobiles in Their Work.

Austin, Tex., May 24.—[Special.]—At this time there is more buying of automobiles for practical business service than ever before. Much of the trade is in the rural districts where farmers find the use of cars necessary to their work. The fact that crop prospects in Texas are unusually bright at this season is serving to stimulate the sale of automobiles to farmers. It is anticipated that there are now approximately 261,000 automobiles in Texas.

Great Growth in Oil Industry of Texas.

Houston, Tex., May 24—[Special].—Some interesting figures on the production and value of petroleum in Texas have been compiled by Dr. William B. Phillips of Houston. Starting with 1889, these figures show a production of 48 barrels, which had increased to a total of nearly 32,000,000 barrels in 1917. The first great increase occurred in 1902, following the developments at Spindle Top.

The figures of Dr. Phillips are as follows:

PRODUCTION AND VALUE OF PETROLEUM IN TEXAS, 1889-1917.

Year	Barrels of 42 Gallons.	Total Value.	Value per Bbl.
1889	48	340	\$7.08
1890	54	227	4.20
1891	54	227	4.20
1892	45	225	5.00
1893	50	210	4.20
1894	60	420	7.00
1895	50	350	7.00
1896	1,450	4,000	2.76
1897	65,975	65,975	1.00
1898	516,070	282,249	0.52
1899	669,013	473,443	0.70
1900	836,939	871,396	1.04
1901	4,393,658	1,247,351	.29
1902	18,083,658	3,908,697	.21
1903	17,355,572	7,517,479	.42
1904	22,241,413	8,156,230	.37
1905	28,136,189	7,552,262	.27
1906	12,567,897	6,565,578	.52
1907	12,322,696	10,410,865	.84
1908	11,296,464	6,700,708	.60
1909	9,531,467	6,793,050	.71
1910	8,896,256	6,906,735	.74
1911	9,325,474	6,554,352	.69
1912	11,735,057	8,852,713	.75
1913	15,009,478	14,675,593	.97
1914	20,068,184	14,942,848	.74
1915	24,942,701	13,026,925	.52
1916	27,644,606	25,769,315	.93
1917	31,871,840	39,202,363	1.23
	288,258,527	\$190,362,356	

EAST AND WEST PASCAGOULA LINK IN SPANISH TRAIL COMPLETED.

Shortens Distance Between Mobile and Biloxi Forty Miles.

What is destined probably to be among the most important engineering operations on the Gulf coast has now been completed. It is "The Old Spanish Trail," between the East and West Pascagoula rivers, which gives an uninterrupted speedway from Mobile to Bay St. Louis, Miss., and thence, as soon as that link is completed, to New Orleans.

Some 15 miles north of the Gulf of Mexico the Pascagoula River divides itself into two streams, and the intervening land is an area of salt marshes, lagoons and bayous. The land is a stiff black clay, and is covered with marsh grass. By building a road through this marsh land from the East to the West Pascagoula rivers the distance between Mobile and Biloxi was shortened by at least 40 miles. The average width of the marshes is 3.5 miles.

At the West Pascagoula River a dredgeboat was set to work digging a canal from that river to the East Pascagoula River, and the material dredged out was used in building a highway across. The total length of the highway was 14,890 feet. The canal is 35 feet wide and 5 feet deep, and a mattress of pine saplings was laid as a foundation, and upon this the dredged material, a heavy black or blue clay, was placed. The base of the highway is 48 feet, with a top surface width of 16 feet, and the surface elevation is five feet above mean low tide. The average rise and fall of the tide is 18 inches. The fill required 156,400 cubic yards, and there are bulkheads at the crossing of each lagoon or bayou which required 7270 feet of creosoted sheet piling. In addition to the embankment, there are several trestles crossing lagoons and bayous, a total of 1950 linear feet. The embankment or roadbed is surfaced with oyster shells. The speedway is protected from the danger of storms coming from the Gulf by the embankment of the Louisville Railroad, which is 16 feet high, and which effectually guards the road from any tidal wave.

The MANUFACTURERS RECORD on March 23, 1917, had an article calling attention to the advisability of making the "Spanish Trail" a military highway. Should a foe land on either the Atlantic or Pacific seaboards, supplies of men, munitions and other materials must be brought from the coast and Central States to the strategical point of danger, and the late experience of this nation during the coal famine has demonstrated that the railroads cannot be depended on to do this work effectively. For your railroad under the most favorable circumstances is only a highway whose carrying capacity is limited, while an improved inland waterway or a military road upon which motor trucks can be used to

advantage are highways whose carrying capacity is unlimited. It thus behooves this nation to bring its waterways and roads to the highest possible state of efficiency.

The Spanish Trail, after leaving the West Pascagoula River, goes through Ocean Springs, and it was here at the mouth of Fort Bayou, over which the road passes, that Le Moyne D'Iberville, in February, 1699, built his first fort and established the first capital of the Louisiana Territory. The route is called the

"Spanish Trail" because it is supposed to be the route followed by Hernando De Soto when he set out from the Bay of Espirito Santo, Fla., on his journey to Mexico. The exact route is a matter of doubt, but it is a historic fact that does not admit of dispute that it was at or near the present city of Mobile that De Soto in 1541 met and fought the Maubilians and Alabamons and then continued his journey to the Mississippi.

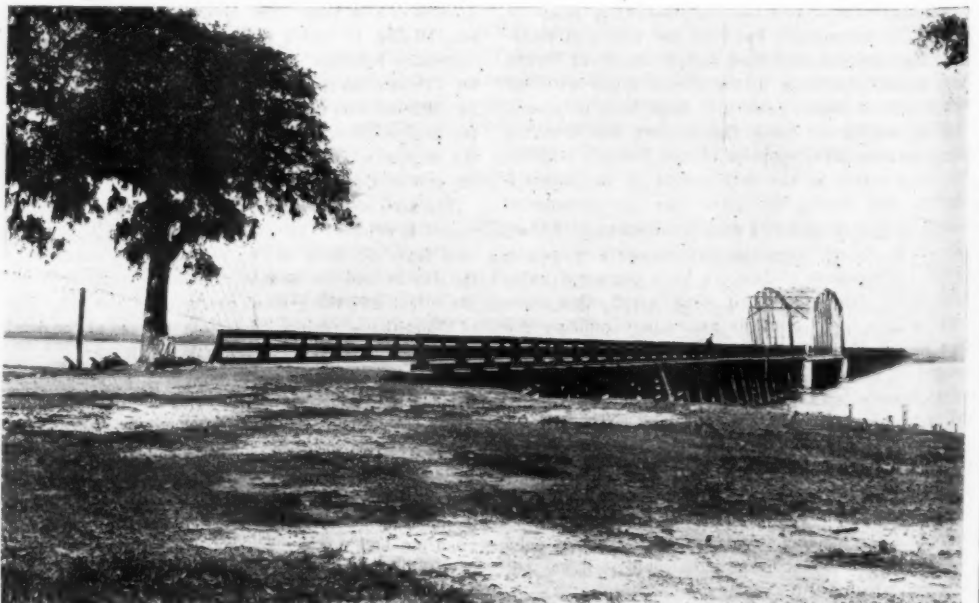
CHARLES E. CHIDSEY.



PADDLE-WHEEL FERRY-BOAT ON THE "SPANISH TRAIL" AT EAST PASCAGOULA RIVER.



SECTION OF "SPANISH TRAIL" HIGHWAY, SHOWING CONSTRUCTION THROUGH MARSHES.



STEEL BRIDGE ACROSS WEST PASCAGOULA RIVER ON THE "SPANISH TRAIL."

Record Performance of Motor Trucks Running as a Red Cross Supply Train from Chicago to Baltimore Shows Value of Good Highway.

Efficiency of the motor truck in long-distance hauling was demonstrated by the Goodyear Tire & Rubber Co. of Akron, O., in the deflection of five trucks from its Akron-Boston line to Chicago, bearing 18 tons of tires, thence to Baltimore with a load of Red Cross

hospital supplies, and from there to Trenton, where 20 tons of wire rope were loaded and transported back to Akron.

As an example of the practicability of inter-city freighting by motor truck, and of the flexibility of motor truck service in general, this Akron-Chicago-Baltimore-Trenton-Akron trip offers concrete evidence to the motor traffic world. The entire program which the fleet set about to follow was fulfilled strictly according to sched-

ule, showing conclusively the degree of perfection that has been reached in handling these heavy-duty rubber-tired freighters.

Encouraged by a year of success in operating its fleet of big pneumatic-tired trucks between Akron and Boston, the Goodyear company utilized five of these trucks to transport an emergency shipment of tires to its branch at Chicago. In the main, the Lincoln Highway route was followed, deviations having been made where parallel roads were in better condition. The 440-mile distance between Akron and Chicago was completed in 35½ hours, elapsed time, which is as good as the time made in shipping by express between the same two cities. The actual running time of the trucks was 22 hours, the other 13½ hours having been consumed in stops for gas and oil, food, an occasional repair and bad roads.

Before leaving Akron the services of the fleet had been donated to the Central Division of the American Red Cross, for the transportation of hospital supplies to Baltimore for reshipment to France. The trucks were loaded at headquarters with 18 tons of hospital supplies, and as a Red Cross motor supply train, the first ever utilized by the American Red Cross Society, the trucks set out on their journey for the Eastern seaboard.

The run from Chicago to Baltimore, a distance of 850 miles, was accomplished in the record time of 100 hours, the route followed being the Lincoln Highway as far east as Chambersburg, Pa., where the fleet turned south through Hagerstown and Frederick, Md., to Baltimore.

The regular custom of continuous driving was followed on this trip, each truck having two drivers, working in relays, one driver sleeping in a specially-constructed compartment, while the other operated the truck.

Upon arrival at Baltimore the trucks delivered their loads to the export agent of the Red Cross, unloading directly into the lighters, which bore the much-needed supplies to a ship in the harbor for shipment to France. Although rendered somewhat blasé, because of the many army truck trains constantly pouring into the city, Baltimore paused to welcome this first Red Cross motor supply train, and great interest was shown in it while parked at the Courthouse Plaza.

From Baltimore the fleet proceeded to Trenton, N. J., where a load of wire rope was picked up at the big Roebling plant for transport back to Akron. In just one week after leaving Chicago the trucks were back in Akron ready to resume their regular Akron-Boston schedule.

The remarkable time made by the trucks is accounted for largely in the pneumatic-tire equipment. The use of these big cord tires, instead of solid tires, is responsible for the average of 16 miles per hour, which the trucks were able to maintain during their actual running time.

Much interest has been aroused in recent months over the possibilities of developing speedy overland freight service by means of large trucks, running on pneumatic tires, to help in relieving the railroads of a portion of their burden. The Goodyear accomplishment is but a suggestion of the wonderful future that motor-truck transportation holds for shippers throughout the entire country.

Building Aeroplanes at Raleigh, N. C.

Raleigh, N. C., May 23.—[Special.]—The building of aeroplanes is in progress at Raleigh, and it is expected that the first machine will take the air in about 30 days.

The United States has sent 185 young men from all parts of the State to the State Agricultural and Mechanical College at West Raleigh to be trained as artificers, engineers, electricians, wood and iron workers, for service in France. The service is intensive, so that in two months the men, who are being trained by the college experts, can go to France. They are very keen at their work. This college is one of the Officers' Reserve Training Corps schools. Nearly the entire student corps is already in the war service, and a mere handful of upper classmen represents the institution at the closing exercises next week. The lower classmen go into camp for two months at the State National Guard camp at Morehead City, on the coast.

\$500,000 Coal Mining Enterprise.

Kentucky coal land will be developed by the Mason-Harlan Coal & Land Corporation of Covington, Ky., chartered by J. W. R. Bradford, John H. Schluster and R. C. Mason. The capitalization is \$500,000.



RED CROSS MOTOR TRUCK TRAIN LEAVING CHICAGO FOR BALTIMORE WITH SUPPLIES FOR FRANCE.



RED CROSS MOTOR TRUCK TRAIN ON MARYLAND STATE HIGHWAY NEAR HAGERSTOWN EN ROUTE TO BALTIMORE.

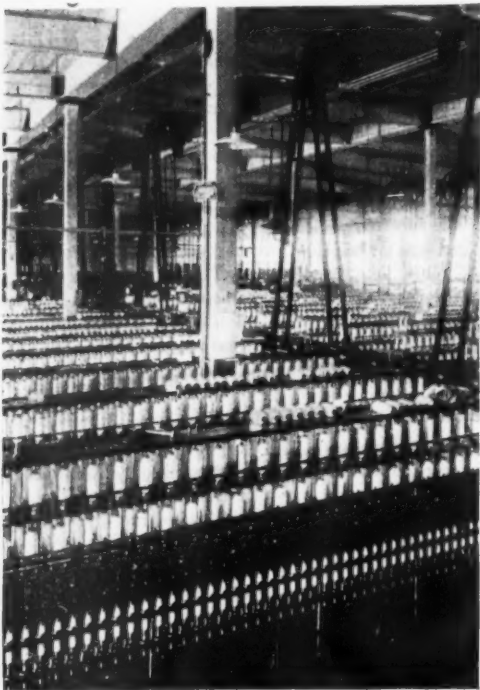


RED CROSS MOTOR TRUCK TRAIN ARRIVING IN BALTIMORE FROM CHICAGO WITH RED CROSS SUPPLIES FOR SHIPMENT TO FRANCE.

Modern Plant Facilities as Well as Comfortable Living Conditions Make Contented Workmen.

Corporations are "soulless" and negligent of their employees' interests is the assertion sometimes made by those ignorant of the facts. An illustration of what many concerns are doing for the welfare of their employees, both inside the plant and outside, is found in the work that the Coosa Manufacturing Co. of Piedmont, Ala., is carrying on for the betterment of living conditions of its employees.

Not only have ample provisions been made for the best machinery and equipment of the company's works, where nearly 500 people are engaged in the manufacture



SPINNING MACHINES DRIVEN BY C. S. MOTORS.

of combed hosiery yarns from raw cotton, but the Coosa Manufacturing Co. takes a deep interest in the welfare of its employees and has made careful plans for their education, health and recreation.

A factory day school is maintained, in which 120 pupils are taught the ordinary branches of schooling. The county of Calhoun, in which Piedmont is located, supplies one teacher and the company furnishes a teacher and also the books and equipment. An interesting point in this connection is that company schools like these are the only ones in the State supplying books free of charge, as all the State schools require the pupils to purchase their own books.

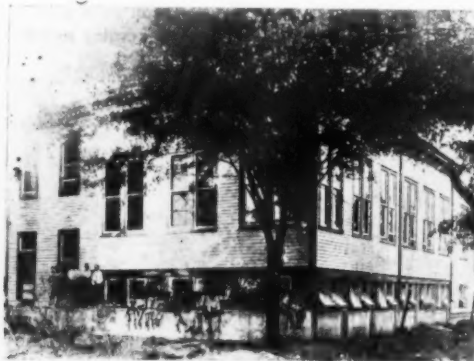
Probably the most interesting feature of this work is the Y. M. C. A. maintained by the company, with a membership of over 300, comprised practically altogether of employees of the mill and their families. It is a branch of the National Textile Y. M. C. A. The building shown in the accompanying cut includes a gymnasium, a swimming-pool, library, shower baths and pool tables. The dues are only \$3 per year for men and \$1.50 per year for women. Domestic science lectures are given at frequent intervals, and arrangements are being made for motion picture entertainments to be given regularly. Special provisions are made for the women to enjoy the facilities of the clubhouse, they being admitted at certain times during the week, on which occasions the admission is open to them only. Similarly, men only are admitted on certain days, while other evenings are devoted to entertainment features for both men and women.

The company owns 130 houses, which it rents at very reasonable rates to the employees, many of whom are purchasing their own homes by small monthly payments, a policy with which the company is entirely in sympathy. A sewerage system connected with that of the town and electric lights at \$1 a month or 25 cents per room, are features that make these homes desirable and highly appreciated by the employees.

A 10 per cent. bonus, in addition to their wages, is paid all the employees who are of an unusually high grade of cotton mill labor.

Another and important factor is that the plant is

modern and up to date in every respect, as the old equipment has been replaced with new and efficient types. The management has adopted electric drive for the mill and purchases its power from the Alabama Power Co. The current furnished is of 22,000 volts and transformed down to 550 volts for application to



Y. M. C. A. BUILDING FOR EMPLOYEES.

the various motors throughout the mill. A portion of the 550-volt current is again stepped down to 110 volts for supplying lights to the mill and vicinity, a regulator being used on the circuit for the purpose of insuring a constant voltage at the lamps.

Approximately 70 motors, representing a connected load of 1600 horse-power are used to drive the various machines. The change for the electric power supplies is based on a maximum demand for 1160 kilowatts.

Forming a part of the power equipment is the steam plant formerly used to operate the mill, which incidentally has never been used since the adoption of electricity. Ample protection against fire is provided by a steam pump in connection with a tank, a cistern and a well. Fire is kept under the boiler at all times for emergency use.

All of the motors, control and switchboard were furnished by the Westinghouse Electric & Manufacturing Co., East Pittsburgh, Pa.

Governor and Mrs. Bickett to Inspect Aluminum Plant at Badin.

Raleigh, N. C., May 27—[Special.]—The Hardaway Construction Co., which is building the supplementary power dam at the American Aluminum Co.'s plant at Badin, on the Yadkin River, in Stanly county, loses two months' time by a fire, due to lightning and poor fire protection, which burned its concrete-mixing plant, which had a daily capacity of 1500 cubic yards. The loss was total, with no insurance. Rebuilding is in active progress. This dam will cost about \$1,500,000 and will develop 32,500 horse-power. It is not built for pondage, but to use the water from the gigantic dam 180 feet high, two miles above, taking this water under a head of 50 feet.

The great aluminum plant has a daily capacity of 63 tons and is operated to the limit, the United States taking all the output.

Governor and Mrs. T. W. Bickett will visit this great plant May 31, and both will speak—Mrs. Bickett to the children in the public school in the afternoon and the Governor in the evening. This public school, easily the finest in the State, costing \$70,000, is the gift of the Aluminum company to Badin, the county of Stanly and the State. The Governor will in the evening dedicate the new theater, just completed, costing \$140,000, and with a seating capacity of 1000.

This theater has the honor of being equal in all respects to the finest in this country south of Washington, and above it is a noble hall room. The company is sparing neither pains nor money in its plans to make Badin a model community, and Governor and Mrs. Bickett will see every detail of its life, including the altogether admirable housing arrangements for the white laborers and also the negroes, who live in separate villages, with every dwelling sanitary, with a complete water supply, fire protection and such attractive general settings that the place looks like a little city. There are gardens for all and a common dairy.

Mr. J. E. Thorpe, the general manager of the plant and the town as well, spent today here, making the arrangements for the visit of Governor and Mrs. Bickett, who will be his guests. They are to be shown all the operations of the immense plant, including the manufacture of carbons and of aluminum, embracing the tapping of the furnaces. Hundreds of persons from Stanly and other counties in that region will be present to

greet the Governor, who will be introduced by Mr. Clement Manly of Winston-Salem.

The American Aluminum Co. is also building two large dams, costing about \$2,000,000, in extreme southwestern North Carolina, to furnish power for another great plant it owns and operates at Maryville, Tenn.

New Development Planned for North Central Texas Oil Field.

Dallas, Tex., May 25—[Special.]—Another of the largest oil-producing companies in the United States will shortly be added to the list of those which are developing the new field in Stephens and Eastland counties, Texas, west of Dallas and Fort Worth. By a deal recently consummated, and involving a cash payment reported at more than \$1,000,000, the Ohio Oil Co., through a subsidiary, the Mid-Kansas Oil & Gas Co., obtains the right to drill on various leases held by the Texas Pacific Coal & Oil Co. in the counties named. It is understood that the Mid-Kansas company will start an intensive development campaign, using not less than 20 drilling rigs.

The Ohio Oil Co., a former subsidiary of the Standard Oil Co. of New Jersey, is one of the most important oil companies in the country. Its headquarters are at Findlay, O., and it operates in Ohio, Indiana, Illinois, Kansas and Wyoming. The company has \$15,000,000 capital, all issued. Its financial statement as of December 31, 1917, showed assets of \$85,484,282. Its shares are of \$25 par value and are quoted at about \$330, which indicates a market value of over 13 for 1.

J. C. Donnell, president of the company, is one of the shrewdest and most successful men in the oil business. His judgment carries as much weight with leaders of the industry as that of any man in the game, therefore his decision to spend millions in the North Central Texas field must be taken as further evidence of the good opinion which experienced operators have as to the future of the new oil territory.

This makes the third important deal consummated by the Texas Pacific Coal & Oil Co., two having been made previously with the Prairie Oil & Gas Co., another former Standard subsidiary. The contracts in each instance are said to be similar, the Prairie and Ohio interests reimbursing the Texas Pacific for the right to drill on designated leases. The expense of development is borne by the Prairie and Ohio companies, and if oil is found the Texas Pacific receives half the production and pays half of the cost of operations.

Through reimbursements of this character the Texas Pacific will have received several millions of dollars before the end of the year.

Motor Transportation Line.

The Tidewater Rapid Transit Co., capital \$100,000, of which \$25,000 is preferred and \$75,000 common stock, has been incorporated and organized in Virginia to establish and operate motor transportation lines in the "Northern Neck," which is that part of the State lying between the Potomac and the Rappahannock rivers.

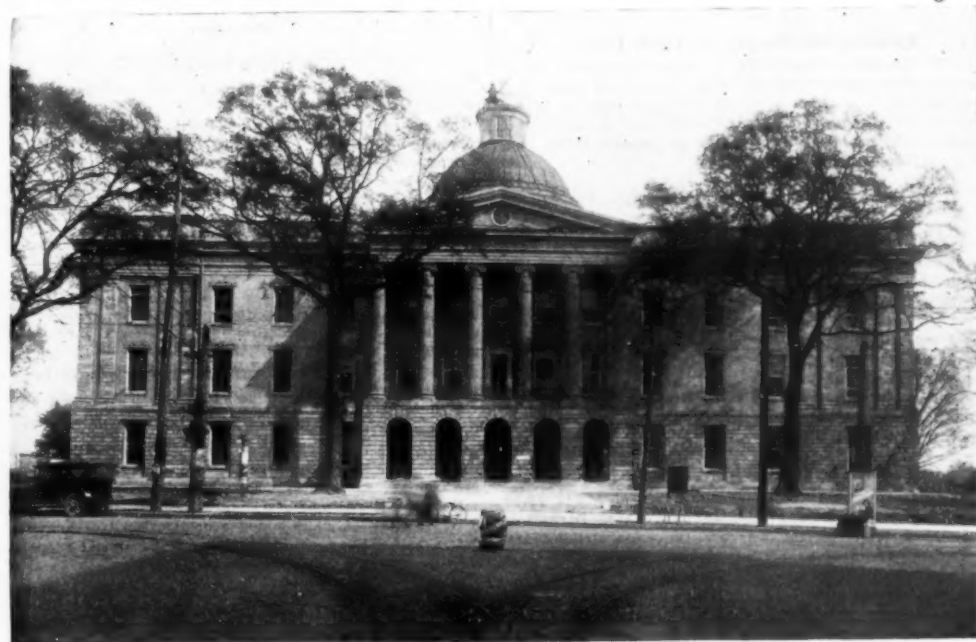
O. H. George, president, Millenbeck, Va., says in a letter to the MANUFACTURERS RECORD that the section contains from 65,000 to 75,000 population, and it is intended to give passenger, freight and express service. "Primarily," he continues, "our service will be restricted to the transportation of passengers over a main line through the center of the 'Neck,' approximating 100 miles in length, with terminals at White Stone and Reedville, connecting there with steamer lines, and at Fredericksburg with a trunk line railroad." (Main line between Washington and Richmond.)

"Fares will be charged upon a basis of 10 cents per mile for the first 10 miles and five cents per mile for each additional mile, with the issue of 100-mile books at \$5, giving everyone the benefit of the mileage rate. Equipment will probably be White two-ton trucks, equipped with Avery type body, 45 horse-power motor, with a speed of 35 miles per hour, enabling us to maintain a good schedule and to average at least 15 miles per hour. Our roads are good for the most part, and we have every assurance of highway improvement, and it is our intention to begin operations as soon as possible and improve our schedule and service along with the improvement in the highways."

G. E. Lewis, also of Millenbeck, is secretary-treasurer of the company.

At a recent meeting of the Naval Consulting Board Mr. D. W. Brunton of Colorado was elected a member of the board.

MISSISSIPPI'S HISTORIC OLD CAPITOL RESTORED TO USEFULNESS.



Jackson, Miss., May 24.—[Special]—Completed in 1839 at a cost of \$340,000, used until 1903, when Mississippi's new million-dollar capitol was finished, and brought back to a life of usefulness at a cost of \$125,000, is a history in brief of the old capitol at Jackson, one of the most richly historic buildings in the South, and a handsome specimen of classic architecture.

From a crumbling ruin, which seemed about to be destroyed by time, with all its wealth of memories, the old capitol has been rejuvenated and is not only a storehouse of history, but a very useful modern office building, where some of the most important branches of the State government are sheltered.

T. C. Link is the architect who brought the old building back to life when it was thought to be hopelessly gone, and the Standard Construction Co. of Meridian did the actual work. Steel and concrete were used to brace the tumbling old brick walls, and experts say the building is stronger today than it was in its first youth.

The fine old dome, with its graceful hand-carved decorations, has been brought back to freshness, and all the arabesques and ornamental scroll work have been gone over, so that every trace of age has disappeared. The interior of the dome is done in buff and blue. The copper sheathing on the exterior is a part of the original building.

Concrete floors and stairways help to make the building fireproof. It already possessed wide, high windows, giving plenty of light and ventilation and a modern

steam-heating plant has been installed. An indirect lighting system is in use.

Convict labor was used in practically every bit of the work of restoration, and so economical was it found that a part of the \$125,000 appropriated for repairs to the building was turned back to the State.

The original intention was to preserve the old capitol as a monument, and as a home for the Mississippi Department of Archives and History, but the rapid growth of several important State departments caused a change in the plans, and now the departments of education and agriculture, the State banking department and the State geological survey all have ample and convenient quarters in the old building, whereas they were very much cramped in the new capitol, which was outgrown very soon after its completion.

The Secession Convention of 1861 met in the old capitol, Jefferson Davis made his last public appearance there in 1884, Thaddeus Kosciuszko spoke from its portico, it passed through the terrible days of Civil War and the reconstruction, and sheltered Adelbert Ames, Mississippi's carpet-bagger Governor. L. Q. C. Lamar, Walthall, Prentiss and all the other political giants of the past generation knew its halls.

Restored, the building compares favorably in beauty and usefulness with most of the South's capitols, and with the new capitol furnishes ample office room for the ever-growing departments of the State government.

The people of the State generally are delighted with the wonderful work of restoration that was done at so small a cost.

We Must Win the War!

Herewith are some striking extracts from an address delivered last week at Chicago before the tenth annual convention of the International Railway Fuel Association by E. H. De Groot, Jr., chief of Bureau of Car Service, Interstate Commerce Association and assistant manager of the Car Service Section, United States Railroad Administration, on the transportation department in fuel economy:

"Obstruction may be negative as well as positive, and any man who leaves undone any single thing possible to him which would contribute to the highest operating results is failing to that extent to support the Government in the greatest crisis of its existence.

"We must win the war! What will it profit us, though we send our boys to the battlefields by the million, if we at home waste the coal needed to adequately support them with supplies and munitions or upon which our gallant allies are dependent to enable them to hold out?

"Stop leaks and save steam.

"There is no way in which the trainmen can contribute so much toward the good cause of saving coal as by stopping the train line leaks before starting on the trip. Leaks are crimes when coal is a military necessity!

"It is no longer a question whether the sons of a

decadent age are worthy of their sires, but a burning question whether we fathers of America are worthy of our noble sons! And these sons will judge us—those who come back. How shall we meet them if we have betrayed them in the matter of the fullest support, or, like Peter, followed afar off?

"Listen to the prayer of a young Briton—this is their spirit:

He prayed,

There where he lay,
Blood-sodden and unkempt,
As never in his young carelessness he'd dreamt
That he could pray.

He prayed;

Not that the pain should cease,
Nor yet for water in the parching heat,
Nor for death's quick release,
Nor even for the tardy feet
Of stretcher-bearers' bring aid.

He prayed;

Cast helpless on the bloody sod;
"Don't trouble now, O God, for me
But keep the boys. Go forward with them, God!
O speed the Camerons to victory!"
The kilts flashed on: "Well played," he sighed,
"Well played."
Just so he prayed.

Inadequate Transportation as Viewed by a Western Concern.

CHAS. G. DENHAM, Contractors Machinery Co., Kansas City, Mo.

Since my return from the State of Florida, about January 15, I have been reading with the greatest of interest your forceful and convincing editorials. Without the least intention of flattery, but in all truthfulness, I wish to congratulate you, as a unit, on your manner of presenting to the public mind the vital topics of the day.

I am especially interested in your articles of the April 4 issue, bearing on the car situation in the South, especially in the State of Florida. On this subject I may perhaps give you some information which came to light during my five months' tour this winter.

Engaged in the lumber business, I came in contact with many of the farmers from all parts of the country, and myself holding some real estate in the northern part of Florida, I naturally studied conditions as they actually existed. One man with whom I spoke, who has some 300 acres of fertile potato land, advised me that on account of the car situation, shortage, unfavorable schedules, etc., he had planted but one-half of his land in potatoes, whereas the preceding year he had planted the entire tract in potatoes. The balance of his land he had planted in vegetables, such as radishes, lettuce, etc., which he could readily market in the nearby cities. Another man advised me that, due to the scarcity of adequate transportation, he had lost over half of his products.

These are but two instances of many similar ones which came to my attention, but they will suffice. I also traveled over considerable of the State during my stay in Florida, and saw many cars pulled up on sidings which had evidently been lying there for an indefinite length of time.

It takes but a careful investigation into this vital situation to convince the most skeptical that the railroads actually do furnish inadequate service. Perhaps the blame should not be too heavily placed on the shoulders of the railroads, for there is no doubt that a great deal of the trouble can be traced directly to those who receive shipments, hold them on sidings, willingly paying demurrage charges, in order that they may "play the market" and get their price. This is a common practice even during these critical times, and the solution, in my mind, and that of many business men with whom I have talked along these lines, is this:

The Government and the railroad officials, co-operating together, should place such a heavy penalty upon those who hold the cars that they will be forced to promptly unload and send on to other points to their original destination. This can be done, and should be done, for the good of the entire country.

Two years ago I saw the effects of tying up cars, being at that time employed in one of Kansas City's foremost grain houses. The "bulls" bought car after car, refusing to sell until the market fluctuated to its highest level. For days this went on, cars in the meantime standing idly on side-tracks. Farmers "got next" and refused to sell. This hampered trade, transportation and business in general, causing us to face a most serious condition. It was at this time that our honorable President took the situation in hand and put an end to option. Immediately the car situation became relieved, and while the railroads in this section of the country have never completely recovered, cars are now moving more freely than for months. Even as it is, we see cars standing day after day, unmolested, unmoved, in the various freight yards.

The Government, now having control of the railroads, should enforce a law whereby cars should not be allowed to stand on any siding, in yards or elsewhere more than a few days at most. The railroads, co-operating with the Government, should have their men out making records of cars which have served their time in idleness. To some this may appear impossible, but it is not. A few cars unloaded on the ground by the side of the track would soon make necessary some system, other than cars, for storing the various contents. This is the only way in which this can be brought forcefully home to the many "profiteers." This would necessitate system, the secret of success.

Another method which I think might well be considered would be that of giving foodstuffs preference over all other shipments. For instance, furniture, carpets and other small articles, insignificant compared to the need of food, should be shipped but once a week, and on all other days, or until satisfactory transportation

had been furnished, food, cattle, etc., should be shipped only. This might appear unfair to some men who have not given this idea consideration, but during war times anything which will tend to lessen transportation accommodation should be broad-mindedly put to one side.

I could cite other instances, but this will suffice to give the ideas of others.

I voice the appreciation of not only myself, but of the Contractors Machinery Co. also, of your splendid articles.

Government Wants Men for Naval Reserve Flying Corps.

Another opportunity is presented to the young men of Maryland to enlist in the ground work branch of the Naval Reserve Flying Corps. The Baltimore headquarters of the Naval Reserve Force is at 125 E. Baltimore street, and the enrolling officers expect to be rushed for the next week or so by many applicants for this extremely popular branch of the service. This branch has been shut down for some time, and its reopening should be of great interest to a number of men.

Men of practically every trade and occupation are wanted, and nearly all of them who qualify will be rated as petty officers and given a course of instruction on aviation work before they are actually placed in the field.

The following is a summary of the kind of work required of them in connection with the construction and repair of airships, and a brief list of the occupations which qualify men for a petty officer rating to do this particular work.

Machinists' mates are wanted for construction and repair work on seaplane engines. Men with the following qualifications are wanted for this work: Toolroom machinists, engine assemblers, automobile mechanics and engine-men, chauffeurs, milling machine operators, lathe operators, screw-machine operators, die manufacturers, etc.

Quartermasters are required for repairing and constructing the seaplanes, with the exception of the engine, and for fitting the cloth on seaplane wings, painting, etc. Men who have had experience as cutters and cloth fitters, tailors, auto top makers and trimmers, wire rope and wire makers, tentmakers, sailmakers, sign painters, carriage painters, furniture finishers, rope splicers and upholsterers are wanted for this work.

Carpenters' mates will be enrolled for work in connection with the construction and repair of the fuselage (body) pontoons, struts and propellers of the seaplanes. Woodworkers, patternmakers, cabinetmakers, piano builders, carpenters, boat builders, mill workers, coopers, barrel makers, etc., are qualified for this work.

In addition to the Flying Corps, men are wanted for the seaman branch. Bakers, cooks and colored mess attendants are especially needed at this time.

Another attractive feature of this service is the opportunity given to all enlisted men to attend the officers' training schools and the pay officers' schools.

Men who are registered in the draft will be accepted if they are not in the current quota of their local boards.

Motor Truck Breaks Record for Hauling Eggs.

The first commercial truckload of eggs from Vineland and Millville, N. J., into New York city, about 140 miles, arrived recently with not one egg broken. Delivery from the shipper to the wholesaler was made in 15 hours, which is faster time than that made by express shipments and establishes a record for motor haul of eggs, according to the Bureau of Markets of the United States Department of Agriculture, which arranged for the demonstration. The five-ton truck carried 150 crates of eggs, weighing nearly four tons, the rest of the load being made up of crated glass. It left Vineland at about 11 A. M. and arrived in the wholesale district of New York city at 2 o'clock the next morning.

Big Virginia Coal Development.

Twenty-five hundred acres of Virginia coal land will be developed by the Anthracite Coal Corporation of Christiansburg, which has been chartered by Illinois and Wisconsin capitalists. Plans contemplate a daily capacity of 300 tons of coal during 1918, 500 during 1919 and 1000 after that year. Officers have been elected as follows: C. C. Mathey, president and manager; F. W. Mathey, secretary; both of Galena, Ill.; F. W. Robinson, vice-president, Chicago; A. C. Kletsch, treasurer, Milwaukee.

Comments, Kicks and Commendations

Arousing the People to Their Duty.

C. W. FRANCIS, Francis Farm Agency, Roanoke, Va.—You will find enclosed Postoffice money order for one year's subscription. I would like to add that your paper is doing more to save the world from destruction and to arouse the people to their duty than any paper in America today, and it is getting better every issue.

Nation Must Be Aroused.

ALBERT STEVES, JR., Manager, Steves Sash & Door Co., San Antonio, Tex.—We have been reading with a great deal of interest all of the items that you have been writing about the war, and are thinking seriously of working up a little booklet to distribute among our trade of some of your best articles, according to our idea.

We note that you give us full authority to do this, and we assure you that we will naturally give you full credit for everything that you have written.

The American nation must be aroused, although we think it is a whole lot better today than 90 days ago; nevertheless, they have still lots to learn.

Editorials Most Striking and Convincing.

H. L. DAVIS, Chattanooga, Tenn.—I am enclosing \$2.50 for six months' renewal of the MANUFACTURERS RECORD.

Your editorials on the war are the most striking and convincing of any I have read. I have been cutting them out and mailing them to some rich slackers.

I think the question of labor is our greatest problem. I see scores and scores of young men hanging around billiard-rooms, and the negro section of our city swarms with idle men who work two days and loaf the remainder of the week, while our manufacturers are clamoring for help.

Could Uncle Sam not draft these men for labor in building munition plants and other public works?

A Call Not Easy to Resist.

R. W. WIER, Houston, Tex.—Attached is check for \$10. Please send a copy to the Wier Long-Leaf Lumber Co., Burkeville, Tex., and one to the R. W. Wier Lumber Co., Texla, Tex.

Please permit me in behalf of myself and associates to thank you for the patriotic, effective work you are doing toward winning this great war. The writer has just finished reading your issue of the 9th, and surely no thinking, free people could resist the call to support the Government to the last man and dollar.

"Who Saves His Country Saves Himself."

WILLIAM ERSKINE WIMPY, Halliburton Hall, Clarkston, Ga.—A Georgia boy once said on the floor of the United States Senate:

"Who saves his country, saves himself, saves all things, and all things saved do bless him."

"Who lets his country die, dies himself ignobly, lets all things die, and all things dying curse him."

These words are as true as if they had been spoken by the Son of God, and will be until "the sun grows cold, and the stars are old, and the leaves of the Book of Judgment unfold." Therefore, I commend them to Mr. McAdoo, Mr. Vanderlip, Mr. Hoover and all other ministers in their propaganda to "save! save! save!"

They are letting, unwittingly, the industries of their country die. The old hat, the old suit of clothes, the half-soled breeches and the half-soled shoe propaganda if adhered to and carried to a finality will close the hat store, the clothing store, the shoe store, and every institution and industry in our country the propaganda of "save! save! save!" reaches.

The great American field of industries which is not producing war munitions must be stimulated, fertilized, planted and cultivated as never before, for it is these industries alone that are the very life-blood of our national life. Yelling at a man's customers to "save! save! save!" is to close his business up or throw him into bankruptcy.

It would be more charitable to burn his business up. Where, oh, where is the money to be made to carry out our pledge to ourselves and our Allies if we close up everything but war and think railroads?

Read the Georgia boy's words again, and stop and think, and pray God as you have never prayed before to give you vision!

Man's intellect is the dynamo that runs industry, and the Postal Zone law that goes into effect July 1, 1918, is falling as gently as the rain mist on the lawn machine. The man who does not want to see the American intellect rust will do all his power to stop the Zone rain mist before it begins to fall.

Reclamation Work an Essential Part of War Work.

CONTINENTAL CONSTRUCTION CO., St. Louis, Mo.—Enclosed please find our check for \$5 for renewal of our subscription from April 15.

Your editorials on the war are excellent. We wish to congratulate you on the article appearing in issue of May 2, page 65, relative to land reclamation work as absolutely an essential part of war work.

Passing the Word Along.

E. T. ROUX, E. T. Roux & Son, Manufacturers Long-Leaf Yellow Pine, Plant City, Fla.—We enclose herewith our check for \$5, and kindly ask that you send the MANUFACTURERS RECORD for one year to Rev. R. F. Hodnet, Plant City, Fla. He is doing a great work in the Red Cross and Y. M. C. A. drives. We feel that your cover-page alone for one issue is worth the price of your magazine for a year.

Good Roads and Streets

Contracts Awarded.

Hannibal, Mo.—City awarded \$17,000 contract for repaving street.

Independence, Mo.—Jackson county awarded a \$10,000 contract for 5½-mile road improvement.

Lake Alfred, Fla.—City receives bids until May 31 for constructing 15,000 square yards of asphalt concrete paving, requiring 25,000 square yards of clay foundation and 48,000 cubic yards of earth excavation.

Muskogee, Okla.—Muskogee county opened bids May 27 for constructing 4½-mile gravel road.

Contracts to Be Awarded.

Ellicott City, Md.—State Roads Commission receives bids until May 29 for constructing 14,000 feet of concrete roadway, 73,800 feet concrete shoulders, etc.

Dade City, Fla.—Pasco county invites bids until June 3 for 7500 feet roadway surfacing 12 feet wide.

Drumright, Okla.—City receives bids until June 5 for 50,000 yards of brick paving.

Fredericksburg, Va.—War Department will build 10-mile concrete highway connecting Camp Humphreys (near Fredericksburg), Alexandria and Washington.

Harrisonville, Mo.—Cass county receives bids until June 3 for 12 miles of water-bound macadam construction.

Lynchburg, Tenn.—Moore and Bedford counties will build 12-mile road, estimated to cost \$69,000.

Morrilton, Ark.—Conway county invites bids until June 20 for construction of a 32½-mile highway with 260-foot steel bridge.

Rockford, Ala.—Goosa county receives bids until June 24 for constructing a 5-mile highway.

Yazoo City, Miss.—Yazoo county invites bids until June 5 for building a 28-mile highway.

Bonds Voted.

Clinton, Ark.—Van Buren county issued \$85,000 bonds for building a 30-mile highway.

Luray, Va.—Page county will issue \$5000 bonds for road improvements.

Meridian, Tex.—Bosque county voted \$40,000 bonds for building highways.

Bonds to Be Voted.

Archer City, Tex.—Archer county votes June 15 on \$200,000 bonds for road construction.

Comanche, Tex.—Comanche county votes June 12 on \$350,000 bonds for road construction.

Wharton, Tex.—Wharton county votes June 22 on \$30,000 bonds for constructing highways.

For a 110-Mile Arkansas Highway.

Plans are under consideration for the construction of a 110-mile highway in Arkansas, and Graham Burnham of the Burnham Engineering Co., Glenwood, Ark., is endeavoring to complete the arrangements. Preliminary plans are by the company named, and the road is proposed through Pike, Montgomery, Clark, Garland and Hot Springs counties, with connections to include junction at Joplin, Mo., with the Ozark Trail, the Jefferson Highway, the St. Louis-Oklahoma City Highway and other roads.

Road-Building Projects Approved by Secretary of Agriculture.

In March and April the Secretary of Agriculture, on recommendation of the Office of Public Roads and Rural Engineering, approved 212 State road-building projects, involving more than 2500 miles of highways under the Federal Aid Road Act. The estimated cost of these improvements to the States is about \$15,000,000. The Federal aid allowed is more than \$5,000,000.

The Cotton Movement.

In his report of May 24, Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, shows that the amount of cotton brought into sight during 297 days of the season was 11,968,114 bales, a decrease under the same period last year of 984,721 bales. The exports were 3,649,377 bales, a decrease of 1,317,037 bales. The takings were: By Northern spinners, 2,477,092 bales, a decrease of 116,129 bales; by Southern spinners, 3,719,928 bales, a decrease of 79,013 bales.

Half Million Dollars for New Baking Plants at New Orleans.

New Orleans, La., May 24.—[Special.]—New Orleans baking companies, manufacturing what are styled grocery cakes, are all making large improvements to their plants. Of three new plant of this kind one is about completed, another is in course of erection and a third will be begun within the next few weeks. The value of these new operations totals around a half million dollars. Great increases in the South American trade in this industry is considered the reason for the expansion here.

RAILROADS

COAL SAVING AND RAILROADS.

Employees Can Do Much, But More Cars and Engines Are Needed.

E. W. Pratt, president of the International Railway Fuel Association, made an impressive and important address upon fuel conservation at the association's tenth annual convention last week in Chicago.

"This is no time," said he, "for any of us to count his performance with respect to what the other fellow is doing. The largest single item of railroad expenditure, other than labor, is for fuel. The railroads of the United States use over one-quarter of all the coal mined, and it devolves upon us to exert ourselves to the utmost economy. Ask the average locomotive fireman if he can, by close attention, save a shovelful of coal a mile, and he will say 'sure I can.' Suppose he was firing over in France on the United States Military Railroad, with coal up to \$150 per ton, and he would tell you he could save still more.

"It is stated that in 1917, 50,000,000 tons more coal was mined in this country than in the year before the war, but experts calculate that there was enough slate, stone and dirt in the 650,000,000 tons mined last year to nearly offset the apparent increase of 50,000,000. This means that it took 1,000,000 more cars to haul this 50,000,000 tons of slate, stone and dirt from the mines to the consumers; also a tremendous loss in economical firing, owing to consequent ashes and clinkers, and another 1,000,000 cars to haul them away.

"The miner might say that it would give him less earnings during the year to pick the coal well and the operator might say it would give him less sales for the year, but I contend that this is not true. The output of both miners and the mines will without doubt this year be the car supply at the mines, as has been the case for the last few years, and the railroads are not responsible for this condition, but the public policy toward them for 10 years is. So here is a grand opportunity for the miner, by slight additional exertion, to do the really worthy and patriotic thing, and that without loss to him or his employers.

"The mines have dropped empty cars for trivial reasons. If there be refuse in them, a hole in the floor or the side, a brake chain broken, how little effort by them would avoid the loss of cars for a whole day? I think this item amounts to a total of several thousands cars daily. And last winter, after weeks of unprecedented snow and cold, engines had to run with poor and dirty coal (perhaps the greatest obstacle to railroading), and many an engine 'died' and its train had to be abandoned.

"I have yet to see a miner or an operator who would defer to a railroad man in the matter of patriotism, and I believe, if the proposition is put squarely up to their hearts, that there will be no Sundays or holidays in either the mine, or the railroads, or in the coal yard when it concerns the output and distribution of coal, any more than there is Sunday or holiday in the trenches with the Hun facing our boys and the Kaiser menacing our free institutions.

"The zoning system established by the United States Fuel Administration will save thousands of coal cars per month, yet it will be only a drop in the bucket as compared with what we can accomplish by all pulling together. Thousands of coal cars must be diverted to carry piling and other timber for shipyards and for increased production of iron and steel. It is calculated that the average car in coal trade makes a round trip between the mines and the coal shed only once a month. To help solve the problem we must reduce the time at the mines, on the repair track, on the road and at the coal sheds. But there is also need of a tremendous educational campaign for coal saving in households, coke ovens, power plants and clay kilns. It is individual effort which will solve the fuel problem, but there must be also more cars and more locomotives to haul them."

Another speaker along similar lines at the convention was Robert Quayle, general superintendent of the motive power and car department of the Chicago & Northwestern Railway, who, among other things, said:

"In 1917 the railroads of this country consumed approximately 175,000,000 tons of coal. This, at an average of \$2.50 per ton, would give us a cost of \$437,500,000. If all individuals in the operating end of the railway organization were to work together as one man, each helping the other to save fuel, we could easily

save 10 per cent. of the total used last year, viz., 17,500,000 tons, or in money \$43,750,000."

Mr. Quayle appealed to the officers and all the employees in the motive power departments, both in the shops and on the road, to cheerfully co-operate for the saving of fuel, which he said could readily be accomplished to the extent that he named by united hearty work.

NEW SANTA FE LINES BUILDING.

Oklahoma and Texas Witness Railroad Development of Important Regions.

The annual report of the Atchison, Topeka & Santa Fe Railway contains some interesting particulars concerning its new construction in Oklahoma and Texas as follows:

North Texas & Santa Fe Railway—This line is being constructed westerly from Shattuck, Ellis county, Okla., to terminus at Spearman, Hansford county, Tex., a distance of about 85 miles. The grading is practically completed and tracklaying is in progress. It is expected it will be possible to place the line in operation about July 1 next.

Osage County & Santa Fe Railway—Active construction of this line from Owen, Washington county, Okla., to a connection with the Eastern Oklahoma division of the main line near Fairfax, a distance of about 62 miles, is in progress. On account of the exceptional conditions prevailing at the present time, progress will be somewhat slow, and it is not expected that the line can be completed until the early part of next year.

South Plains & Santa Fe Railway—The extension of this line from Lubbock, Tex., southwesterly to a terminus at Seagraves, Gaines county, Tex., a distance of about 64 miles, is nearing completion. Important towns have been located along the new line, and some commercial business is being accepted at the terminus. It is expected that the line will be completed and turned over for full operation in the very near future.

The Atchison, Topeka & Santa Fe Railway exercised its option during the year to purchase the capital stock and income bonds of the Oklahoma Central Railroad, which property it had leased since August, 1914. In addition to these securities, the company owns, it is stated, approximately 80 per cent. of the first mortgage bonds.

The income statement shows for the year ended December 31, 1917, operating revenue \$165,529,519.25, increase as compared with 1916, \$21,239,280.90; operating expenses \$105,222,878, increase \$16,809,391.04; net operating revenue \$60,306,640.76, increase \$4,429,889.86; operating income after taxes and uncollectible railway revenue \$48,346,699.57, decrease \$730,893.97; gross corporate income \$52,240,228.77, decrease \$315,220.09; net corporate income \$38,185,547.28, increase \$63,358.08; surplus to profit and loss for the year \$7,057,000; aggregate net surplus, including the preceding, \$33,230,068.11.

BIG ENGINE SHOPS.

\$1,700,000 Contract Let by Baltimore & Ohio at Glenwood, W. Va.

The Baltimore & Ohio Railroad has awarded a contract to Westinghouse, Church, Kerr & Co. to erect large locomotive repair shops at Glenwood, W. Va., the expenditure for this purpose to amount to \$1,700,000.

It is stated that the building of these shops will require about 2500 tons of structural steel, which the War Industries Board will see delivered promptly.

H. A. Lane, Baltimore, chief engineer for the railroad company, will have general supervision of the improvement.

Atlantic Coast Line's Year.

The Atlantic Coast Line's annual report covering the year 1917 shows operating revenue \$44,063,331, increase as compared with 1916 \$6,841,246; operating expenses \$29,773,995, increase \$5,713,390; net operating revenue \$14,289,336, increase \$1,027,856; operating income \$12,013,742, increase \$607,505; gross income \$17,192,960, increase \$1,219,855; surplus \$10,834,091, increase \$906,456; balance after dividends \$6,025,147, increase \$280,827; total assets \$282,945,845, increase \$12,637,845.

Frank E. Borden of Goldsboro, N. C., was elected a director at the annual meeting to fill the vacancy caused by the death of his father, E. B. Borden, on May 6.

LESS EQUIPMENT FOR THIS ROAD.

Central of Georgia Loses 17 Engines and 186 Cars During 1917.

The annual report of the Central of Georgia Railroad for the year 1917 says that no locomotives were added to the company's equipment during the period, but that 2 engines were condemned, 14 were sold and 1 was transferred to another class, making a net decrease of 17 locomotives and a decrease of 223,395 pounds in tractive power. There was also a net decrease of 186 cars in the freight equipment. Passenger equipment was increased by the purchase of 17 all-steel cars.

Improvements to tracks included the laying of 29 miles of 100-pound rails and 32 miles of 80-pound rails. There was a net increase of 43 in the number of tracks to industries. About 30 miles of track were ballasted. Automatic block signals were installed and placed in service on 132 miles of line. Improved stations were erected at several places, a new pavilion and bath-house was built at Tybee Island, Ga., and a number of other improvements were made to make for safety and operating facility.

The income account for the year ended December 31, 1917, shows total railway operating revenues \$16,024,537.48, increase as compared with 1916 \$2,290,393.79; total railway operating expenses \$11,045,849.01, increase \$1,764,803.51; net revenue from railway operation \$4,978,688.47, increase \$534,590.28; railway operating income after taxes and uncollectible railway revenues \$4,091,536.16, increase \$367,850.25; total operating income \$4,094,781.16, increase \$371,005.55; gross income \$5,362,241.58, increase \$15,252.68; net income transferred to credit of profit and loss \$2,640,627.69, decrease \$9,023.78.

A decrease of \$355,842.87 in non-operating income and an increase in deductions from gross of \$24,276.46 together account for the decrease in net income.

Operating ratio was 68.93 per cent., an increase of 1.31 points, or 1.94 per cent.

RAILROAD RATES RAISED.

Tickets Will Cost More June 10 and Freight Shipments June 25.

W. G. McAdoo, Director-General of Railroads, has issued an order raising passenger fares to a minimum of 3 cents a mile, to take effect June 10, and freight rates 25 per cent., to take effect June 25. The Interstate Commerce Commission has approved the order.

This action of the commission, it is stated at Washington, is not designed to prevent complaints and hearings concerning particular rates affected by the order. It is also said that the average increase may prove to be higher than 25 per cent. and that numerous changes and adjustments by the Railroad Administration will be made, either on its own initiative after receiving suggestions from shippers and State or other authorities or through order of the Interstate Commerce Commission, which can review and modify the schedules.

It is estimated that the revenues of the railroads will be increased from \$800,000,000 to \$900,000,000 a year by the new rates.

Seaboard Air Line's Annual Report.

The annual report of the Seaboard Air Line, just issued, shows that in addition to completing the extension from Charleston to Savannah, which was put in use January 1 last, the company also finished during the year the revision of grades between Hamlet and Charleston, so that all the way from Hamlet, N. C., to Jacksonville, Fla., the maximum grade in each direction is five-tenths of 1 per cent. Between Charleston and Savannah the maximum is three-tenths of 1 per cent. Grades between Hamlet and Sanford, N. C., have also been revised, so that the grade against northbound traffic is five-tenths of 1 per cent. and against southbound traffic eight-tenths of 1 per cent.

Several important industrial spurs from the main line between Charleston and Savannah are under construction. They will reach fertile farm lands especially adapted to vegetable culture and will be big factors in the industrial development along this new line. Parts of them are already finished. Besides, there has been considerable work done at several points to increase facilities for the operation of the larger and heavier equipment now used on the system. Yards have also been enlarged at different places.

The income account for the year ended December 31, 1917, shows gross revenue \$30,345,146.01, increase as compared with 1916, \$4,160,658.76; operating expenses

and taxes \$23,097,430.89, increase \$4,354,832.88; net operating revenue after taxes \$7,247,715.12, decrease \$194,174.12; operating income after deducting uncollectible railway revenue \$7,237,881.42, decrease \$191,117.48; gross income \$7,629,256.67, decrease \$200,174.02; applicable to interest after rents, other charges and hire of equipment \$6,962,471.64, decrease \$572,831.37; balance after fixed interest charges \$2,104,067.14, decrease \$757,943.48; net income after full 5 per cent. interest on adjustment (income) bonds \$854,067.14, decrease \$757,943.48. Operating expenses alone were 71.57 per cent. of gross, increase 4.61 per cent.; including taxes, they were 76.12 per cent., increase 4.54 per cent.

Regional Directors of Railroads.

The Federal Railroad Administration, following its announcement that the services of all railroad presidents would no longer be required by it, has announced the appointment of several new regional directors, which makes the list now as follows:

Alfred H. Smith, for New York and New England roads, with headquarters at New York City.

C. H. Markham, for the Allegheny district, comprising roads in Pennsylvania, New Jersey, Delaware, Maryland and West Virginia; at Philadelphia.

B. L. Winchell, for the Southern district; in Atlanta.

N. D. Maher, for the Potomac district, comprising Virginia trunk lines; at Roanoke.

R. H. Ashton, for the Western district; at Chicago.

A. R. Smith and G. R. Loyall will be assistant regional directors for the Southern district, the former for traffic and the latter for operation.

J. E. Warrington will be an assistant regional director in the Allegheny district.

L. E. Johnson was re-elected president of the Norfolk & Western Railway to fill the vacancy caused by Mr. Maher's appointment as regional director, and A. C. Needles, vice-president, was appointed Federal director for that road.

It is understood, according to a report from Washington, that Presidents Samuel Rea of the Pennsylvania Railroad and Daniel Willard of the Baltimore & Ohio Railroad chose to remain with their companies rather than act as regional directors, and it is expected that announcements will soon be made of the Federal directors for those systems. Mr. Markham will have the selection of directors for individual roads under his charge in the Allegheny district.

J. H. Young of Norfolk has been appointed Federal director of the Virginian Railway.

Through Service Arranged.

It is announced at Nashville, Tenn., that an arrangement has been made between the Tennessee Central Railroad and the Illinois Central Railroad for direct through passenger, mail and freight service to the North and West, beginning June 2. The route will be from Nashville via Princeton, Ky., and Evansville, Ind. The arrangement was approved by the Federal Railroad Administration. Thus there will no longer be a transfer of passengers, mail and express at Hopkinsville, Ky., the Western end of the Tennessee Central. It is further stated that there will be a saving of 24 hours in the movement of carload freight. The Tennessee Central west of Nashville is to be improved to aid the operation of trains under the new arrangement.

Railroad Appointments.

Hugh Wilson has been appointed division superintendent of the Baltimore & Ohio Railroad (Monongah Division) at Grafton, W. Va., succeeding J. W. Deneen, promoted, and B. Z. Holverstott, trainmaster at Fairmont, W. Va., has been appointed assistant superintendent to succeed Mr. Wilson. P. C. Allen is appointed superintendent of the Baltimore Division to succeed C. B. Gorsuch, granted leave of absence. J. K. Flaherty, road foreman of engines, has been made assistant superintendent at Cumberland, Md.

E. F. Greenleaf has been appointed general superintendent of the Orleans-Kenner Traction Co., New Orleans, La.

Large Demand for Irrigation Equipment in Texas.

Austin, Tex., May 25.—[Special.]—An extraordinarily large demand for irrigation pumping plants and equipment is reported from the western and southern portions of Texas. The State Board of Water Engineers has granted many applications for the use of water for irrigation purposes during the last several months.

TEXTILES

To Dye and Finish Hosiery.

Details have been determined for the hosiery dyeing and finishing plant of the Paul Knitting Mills, Pulaski, Va. An expenditure of \$75,000 is involved, building and machinery contracts having been awarded. The daily capacity will be 1000 dozen pairs of hose, 100 women to be employed, for dyeing and finishing the product of several mills controlled by A. V. Victorious & Co. of New York, managers of the Paul Knitting Mills.

An additional building will be erected to the present plant, to be one story high, of brick construction, with steel window frames and sash, having 6000 square feet of floor space. There will also be another addition, and both structures will be connected by the boiler-house, which will be enlarged. C. H. Hobach of Pulaski has the building contract.

For a \$150,000 Mill.

Plans are being formulated by J. C. Sikes, E. C. Carpenter and M. K. Lee, Monroe, N. C., for the organization of a \$150,000 company to establish a cotton mill. A three-story factory building has been secured and the equipment of textile machinery has been ordered. The plant will employ 200 operatives and 25 dwellings will be erected by the company.

Liberty Hosiery Co.

Officers have been elected for the Liberty Hosiery Co., Rock Hill, S. C., recently mentioned as incorporated with \$25,000 capital. They are: J. C. Cauthen, president; C. L. Cobb, vice-president; J. B. Creighton, secretary. This company has leased a building and will install 50 knitting machines, with electric power drive, for a daily output of 300 dozen pairs of hose.

Textile Notes.

W. T. Bidwell and associates, Benton, Tenn., will build a two-story brick structure and install machinery for knitting hosiery.

The Liberty Hosiery Mill, R. J. Fisher, proprietor, Athens, Tenn., will construct a plant and the building will be 100 feet long by 40 feet wide.

A three-story building costing \$23,000 will be erected by the New Orleans (La.) Cotton Mill & Manufacturing Co., and H. N. Moody is the contractor.

Arrangements have been completed for the Sweetwater (Tenn.) Hosiery Mills' branch plant at Madisonville, Tenn. The company has its building and machinery, the latter to include 40 knitters.

Cotton yarn will be manufactured by the Wendell (N. C.) Spinning Co., which has been incorporated with \$25,000 capital by J. Q. Gant of Burlington, N. C.; Kenneth Gant of Neuse, N. C., and J. E. Gant of Alamahaw, N. C.

A three-story 100x50-foot brick mill-construction building, costing \$50,000, will be erected by the Carolina Mills, Winston-Salem, N. C. This building will replace the company's present structure and will be equipped with machinery for knitting high-grade hosiery.

Three hundred dozen pairs of hose will be the daily capacity of a plant which the Hoover Hosiery Co. will establish at Concord, N. C. This company has leased a building and will install knitting machinery with the electric power drive, to employ 50 operatives. It was recently mentioned as chartered with \$50,000 capital by A. R. Hoover and associates.

Marion Coal & Lumber Co.

Officers have been elected for the Marion Coal & Lumber Co., the \$1,000,000 corporation mentioned May 23 as to develop 20,000 acres of coal and timber land in Marion county, near Sequatchie, Tennessee. They include A. N. Walker (not Oatler, as previously stated), who is president, and Dunnington Yancey, secretary-treasurer, both of Chattanooga.

Sawmills will be installed promptly to cut timber for construction purposes, and a 6 to 10-mile railway will be built into the forests. Details as to water supply, railway construction, portable mill installations, etc., are being considered. The company is prepared to consider proposition for such equipment as pumps for water, 60-pound relay rails, portable sawmills and tractors or heavy trucks for lumber.

FOREIGN NEEDS

To Represent Exporters.

CORONEL & COMPANY, Surinam, Paramaribo, Dutch Guiana. We are in business as manufacturers' representative, and anxious to represent concerns exporting any kind of merchandise suitable for this market. Publish in your reading columns what you think will be beneficial to us in getting in touch with these concerns. In communicating with them we will see to it that the MANUFACTURERS RECORD is mentioned. For references with regard to our standing, apply to: Gillespie Bros. & Company, John M. Maris & Company, International Resident Buyers, each of New York; Sunlit Fruit Co., San Francisco; W. M. Lowmy & Company, Boston.

For Trade in Africa.

I. M. KOSKAS, JR., P. O. Box 21, Tunis, North Africa.—I want to represent American manufacturers of chemicals; polished rice; chocolate in cases, 125 to 250 grammes; satin walnut wood, one inch thick; hosiery; shoepegs, tacks and wire nails; binder twine; yarns; hemp shoe thread, in bale covered with blue paper and with red ticket; glazed kid leather; refiners' sugar; starch in bags of 50 kilogrammes; oil and naphtha for cycles; cotton cloth and crash for suiting; sheeting; prints; broadens; chevrons; zephyrs; shirtings; glassware; oilcloth for floor covering, etc.

For Trade With Ireland.

J. A. QUILTY & SON, Li 39 Roches street, Limerick, Ireland.—We are desirous of fostering a trade in various products between this country and yours. We can see big possibilities for American product expansion in this country in the lines we are interested in. In normal times, with direct service, elimination of middlemen profits would enlarge the connection herein, and we purpose at a later and more favorable opportunity, with the advent of normality, to again write you in full in this matter. We are interested in boots, upholstery fabrics, oils, gasoline, paraffine and glucose.

For Spanish Trade.

AMERICAN CHAMBER OF COMMERCE, Barcelona, Spain.—The American Chamber of Commerce for Spain was organized by the principal American commercial houses and representatives here, with various Spanish gentlemen interested in American trade, in November last year. We are completing organization with the object of giving efficient attention to the many inquiries we are continually receiving regarding American made goods. Our membership will be limited specially as we prefer to maintain a majority in the hands of American members.

France Wants American Products.

G. VINCENT & CIE, 7 Avenue Malakoff, Nice, France.—We would like to become agents for such American houses as want to find a market for their products here. The goods that are of especial interest to us are: Small, practical and economical automobiles; new and restored typewriting machines; sewing machines, rotary shuttles; office furniture; adding machines; accessories for same and for typewriters; strong boxes (safety boxes); copying presses.

To Represent American Manufacturers.

GRAM, N. GRAMENOSPOLO, P. O. B. 762, Alexandria, Egypt.—I am prepared to negotiate with American firms of importance, to develop a continuous business in their lines by assuming the obligation to expand their brands all over our country.

Communicate to American manufacturers that I am ready to enter into serious correspondence if my views meet theirs, to introduce their articles in our country.

Oak Staves and Iron Ore.

CRUZ, PEREIRA & GUEDES, Rua Do Comercio, 42, Lisbon, Portugal.—We desire to acquire a shipment of a s/s only on New Orleans oak staves and iron ore for casks. The New Orleans oak staves to be of first and second quality (red point). The iron ore will be of 1½"x18-1½"x17-2"x16-2½"x15 and 2½"x18. We desire quotations for thin 20x 28-12 leaf 150 pounds, brand I. C. end brass of hard iron Nos. 0 to 9 for a large sale.

From an Argentina Agent.

E. A. SIRTORI, Casilla Correo 1285, Buenos Aires, Argentina.—I will utilize my connections and my knowledge of the market to develop business for your leading houses. I am engaged exporting hides and skins, prices c. l. t. New York. I can export and demand: Mica; lead; copper; antimony; chloride of silver; silver ore; wolfram and tungsten; manganese; vanadium; asbestos; emery; sulphate of soda; cotton; hides; skins; tobacco; seclite.

Stationery Wanted in Egypt.

PRINTERS' & STATIONERS' STORES Co., Cairo, Egypt.—We are concerned in the undermentioned articles. Refer our names to firms willing to establish permanent relations with us. We prefer to communicate direct with them as to our references. The articles are: Writing inks; Litho and type inks and varnishes; bronze powders and leaf-metals; stationers' sundries; pencils; carbon papers; copying tissue letter books; metallic nibs and penholders; glues.

Envelope Machinery for Cuba.

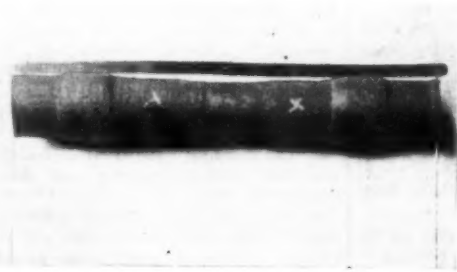
MANUEL F. CANOSA, Apartado 281, Habana, Cuba.—Will be pleased to have a complete list of manufacturers of machines that make small envelopes.

MECHANICAL

Machine to Make Hollow or Solid Car Axles.

A machine for shaping metal by the "circumvolution" process, which is primarily planned for the rapid manufacture of car axles, has been invented and patented by David A. Clark, 914 Fidelity Building, Baltimore. In describing his invention to a representative of the MANUFACTURERS RECORD Mr. Clark said that to make axles by the present method requires from 20 to 30 minutes per axle, and then the axle has to be annealed to overcome crystallization caused by hammering the metal at varying temperatures as it cools, but that his machine will turn out two complete axles in one minute, so that there is practically no time for the metal to cool, as it passes through so quickly.

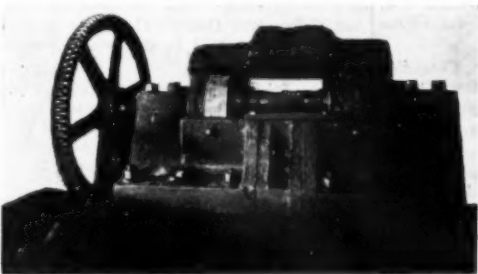
A model machine weighing more than 6000 pounds



AN AXLE MADE BY THE MACHINE.

has been built and is to be seen at the machine shop of the John B. Adt Company, corner of Holliday and Pleasant streets, Baltimore. This model will, he says, shape a piece of metal two inches in diameter and 12 inches long in less than 30 seconds. The metal may be either solid or tubular; the machine will handle it with equal facility and equal results. It is also claimed that this is the only known method of shaping uniformly by pressure a tubular piece of metal without crushing it, unless a mandrel is used, and to use a mandrel for a hollow axle would be impractical because of the varying diameter of the axle, for the mandrel could not be withdrawn after the piece was shaped.

The accompanying illustration shows the front view of the machine. It looks practically the same as would a full-sized machine for making axles six or seven feet long and five or six inches in diameter. The bar or tube, as the case may be, is placed sideways into the rolls which carry it through the machine. Within are other rolls operated by gears which shape the metal while it is yet almost white hot. Every revolution, it



METAL SHAPING MACHINE.

is said, turns out two complete axles, with wheel seats and journals accurately shaped thereon. Any dimension of axle can be made.

Mr. Clark is a believer in the hollow axle, which he observed has long been desired by car builders and railroad men because it neither heats nor crystallizes when in use, and he claims that his machine will meet a long-felt want in the transportation world. Only one man and a boy are required to operate one of the machines, as the blanks from which the axles are made are fed into the rolls automatically as they come regularly from the furnace. He believes that the result of this invention will be the manufacture of pierced billets for making axles. These would be probably five to seven inches in diameter and of a proper length for axle manufacture.

"The many obstacles met in the attempts of the past to make our car axles hollow from end to end," remarked Mr. Clark, "are overcome by the use of my machine, as it is absolutely certain that with pierced billets axles of this type can be successfully made on

a commercial basis, as well as solid axles, and at less cost than with the present method of forging. One machine will shape over 100 standard railroad-car axles per hour, and with its use a continuance process from the ingot to the cooling table is feasible, which will materially reduce the cost of production. Another very important fact is the reduction in man power of at least 500 per cent., as the handling of the metal will be automatic after it leaves the furnace.

An American Product Helped Win Jerusalem.

When General Allenby's forces marched to Jerusalem and captured it from the Turks their victory was made possible by the building of a pipe line across the Sinai desert, 150 miles, supplying them with water. Moreover, this pipe line was made of pipe from the National



LAYING 150-MILE PIPE LINE IN SINAI DESERT.

Tube Co. of Pittsburgh, so that American industry cooperated in a most effective manner with the British army in restoring the Holy City to the Christian nations. A picture of the workmen laying the 12-inch steel pipes across the surface of the desert is presented here, being reproduced from the London Graphic.

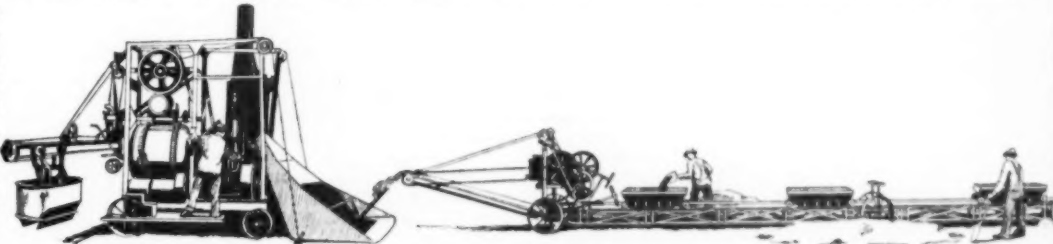
This great engineering feat is described by Major-General Maurice, chief director of military operations of the British War Office, who says:

"In the campaign as a whole the greater accomplishment has been not in the defeat of the Turks, but the conquest of the Sinai desert. The troops which fought at Gaza drank water from Egypt pumped through an American pipe line, and were supplied over a broad-gauge railroad laid clear across the 150 miles of desert which has defeated almost everybody that tried to conquer Egypt for centuries. Every ounce of material for the pipe line, the railroad and the other works came either from Great Britain or the United States.

"All the time this conquest of the desert has been going on the official communications have been able to say only 'nothing to report,' and the public thought we were idle. The fall of Jerusalem was made possible by industry, organization and the help of material from the United States."

Mixer Loader for General Concrete Work.

A mixer loader for expediting concrete work, and which in regular street construction, according to the



KOEHRING MIXER LOADER IN OPERATION.

claims of its builders, eliminates all wheelers and cuts out two-thirds of the labor employed, is shown in the illustration herewith. It is adapted for use with either

end-loading paver mixers or side-loading mixers for other construction work, and it is further stated it can be used with any mixer without changing the latter except for placing a baffle plate in open-end loading skips, which any mechanic can easily do. It is not necessary to put in any baffle plate with a closed-end loading skip.

In paving work the machine precedes the mixer under its own power, and when employed with side-loading construction mixers it bridges the gap between the materials and the mixer. Thus the materials may be unloaded at the curb side, shoveled into the measuring bins of the loader and conveyed by the moving belt to the mixer at the base of an elevating tower, at the side or on the inside of the building, and it does away with all wheeling; it is not necessary to have even one wheelbarrow. But the amount of saving depends upon indi-

vidual practice in loading-crew organization, as well as on the shovelers themselves.

As an example it is stated that the use of this mixer loader in operating a two-bag paving machine on street work may be cited. In such a case the loading crew usually consists of four wheelers for stone and two for sand, or six wheelers per batch; then there are two sets of wheelers and one set of additional shovelers commonly required to keep the machine operating at top capacity, or, altogether, 18 men. Therefore, if with this mixer loader six men are kept for shoveling materials from the subgrade into the measuring bins of the loader, all the wheelers can be dispensed with. There is also, it is stated, a reduction in yardage costs because of the consistent high-speed operation of the mixer as a result of there being no delay in loading it.

This loader is a combination of measuring bins and the belt-conveyor principle applied to a light portable machine, which is supplied with its own power and traction. It moves from job to job under its own energy. It is about 60 feet long over all, and it receives materials from any point within this distance of the mixer. Its operation is easily understood by labor, as complications are absent. It is made by the Koehring Machine Co., Milwaukee, Wis.

Commended for Patriotic Activities.

W. W. BARR, JR., Secretary, Orangeburg Chamber of Commerce, Orangeburg, S. C.—Find enclosed check for our renewal subscription. We take this occasion to commend

you not only for the great work that you have and are doing for the South, but also for your great work along editorial lines for suggestions as to the creation of a great and mighty machine for the winning of the war.

Construction Department

IN ORDER TO FOLLOW UP

Properly the Construction Department items, please bear in mind the following statements:

EXPLANATORY

The MANUFACTURERS RECORD seeks to verify the items reported in its Construction Department by full investigation. It is often impossible to do this before the item must be printed or else lose its value as news, and in some items it is found advisable to make statements as "reported" or "rumored," and not as positive information. If our readers will note these points they will see the necessity of the discrimination. We are always glad to have our attention called to errors that may occur.

HOW TO ADDRESS

The name of one or more incorporators of a newly incorporated enterprise should always be written on letter addressed to the official headquarters or to the town of the parties sought, as may be shown in the item. Sometimes a communication merely addressed in the corporate or official name of a newly established company or enterprise cannot be delivered by the postmaster. By following these general directions the post-office will generally be enabled to deliver your mail promptly, although it is inevitable that some failure by the postal authorities to deliver mail to new concerns will occur, as our reports are often published before new companies are known and before they have any established office for the receipt of mail.

WRITE PERSONAL LETTERS

In communicating with individuals and firms reported in these columns a letter written specifically about the matter reported will receive better and quicker attention than a circular. In most instances a return postal card or addressed and stamped envelope should be enclosed with letter.

In correspondence relating to information published in this department, it will be of advantage to all concerned if the Manufacturers Record is mentioned.

DAILY BULLETIN

The Daily Bulletin of the Manufacturers Record is published every business day in order to give the earliest possible news about new industrial, commercial, building, railroad and financial enterprises organized in the South and Southwest. It is invaluable to manufacturers, contractors, engineers and all others who want to get in touch at the earliest moment with new undertakings, or the enlargement of established enterprises. The subscription price is \$20.00 per year.

AIRPLANE PLANTS, STATIONS, ETC.

Okl., Ardmore.—Airplanes.—Automatic Safety Aeroplane Co., capital \$100,000, incptd. by I. R. Sheppard, W. W. Rucker and W. J. Tarrance.

BRIDGES, CULVERTS, VIADUCTS

Ark., Morrilton.—Conway County Comms., Road Improvement Dist. No. 1, C. E. Cruce, Secy., will construct 260 lin. ft. steel bridge in connection with 3½ mi. road building; bids at State Capitol, Little Rock, Ark., until June 20. See Road and Street Work. (See Machinery Wanted—Bridge Construction; Road and Bridge Construction.)

Fla., Lake Worth.—Palm Beach County Comms. let contract Hill-Dawkins Co. of Jacksonville, Fla., at \$63,700 to construct bridge across Lake Worth; Scherzer roller lift span of 150 ft.; balance of concrete 1000 ft. of causeway; R. F. Goodman, County Engr. (Lately noted inviting bids.)

Fla., Milton.—Santa Rosa County Comms. will let contract June 11 to construct 20x290-ft. steel and concrete bridge; cost \$149,000; J. A. Mortland, Engr., Tallahassee, Fla. Lately noted. (See Machinery Wanted—Bridge Construction.)

Ga., Garnett.—Georgia-Carolina Bridge Co., capital \$100,000, incptd. by W. F. Maner, John S. Baxter and others; construct bridge across Savannah River connecting Georgia and South Carolina.

Ga., Oglethorpe.—Macon County Comms. will construct ½-mi. bridge across Flint River on Dixie Highway from Macon to Thomasville; steel; concrete approaches; cost \$130,000.

Mo., Kansas City.—Board of Public Works will complete bridge over Blue River on Leeds Road; cost about \$50,000; original contract rescinded.

Tex., Elctra.—Elctra Bridge Co. organized with H. N. Haynes, Pres.; J. L. Parker, Secy.; A. T. McDonald, Treas.; erect bridge across Red River to connect Wichita County, Tex., with Tillman County, Okla.; length 3200 ft.; 12-ft. roadway; turnouts 20 ft. wide and 60 ft. long; cost \$30,000; Austin Bros. Bridge Co. of Dallas, Tex., has contract.

W. Va., Caddell.—Preston County will repair bridge over Cheat River at Caddell; cleaning and painting iron work of bridge below wheel guard level, supplying additional stringers and ties, laying plank floor of white or chestnut oak or creosoted wood blocks; County Court, Kingwood, W. Va.,

receives bids until June 3; H. E. Wilhelm, Dist. Engr., Herring Bldg., Kingwood. (See Machinery Wanted—Bridge Construction.)

W. Va., Fayetteville.—Fayette County Comms. let contract to construct 4 concrete bridges costing \$32,000; contract for 2 bridges to Luten Bridge Co. (main office, York, Pa.) and 2 to Komes-Thomas Co., of Fayetteville.

CANNING AND PACKING PLANTS

Ala., Dothan.—Southern Canning Co., Folkston, Ga., is reported as considering establishment of cannery.

Md., Baltimore.—Du Pont Food Products Co., capital \$300,000, organized; A. F. Du Pont, Pres.; Howard R. Taylor, Treas.; offices in Stock Exch. Bldg.; leased factory buildings and site; install machinery to manufacture condensed vegetable and meat products.

Md., Centerville.—Serto Packing Co., New York, will establish plant to manufacture tomato sauce.

Md., Royal Oak.—Royal Oak Packing Co. organized; Howard Hammond, Pres.; Jas. S. Ferguson, Secy.-Mgr.; has let contract for erection mill-construction building with 8600 sq. ft. surface; purchased packing machinery, cost \$8000; pack fruits, vegetables and sea foods. (Noted in April to build plant.)

Tenn., Columbia.—Columbia Packing Co., capital \$3000, incptd. by D. S. Gordon, R. P. Gordon, L. Barker and others.

Tex., Belton.—Marvin R. Martin, County Demonstration Agent, plans establishment of cannery with daily capacity 1500 cans.

W. Va., Kingston.—Solvay Collieries Co. will install plant to preserve food for use of miners; purchased equipment.

CLAYWORKING PLANTS

La., Monroe.—Bricks.—Frank R. Adams of Danville, Ill., is considering establishment of brick plant.

Tenn., Blountsville.—Bricks.—Caldwell Brick Co., capital \$5000, incptd. by Jos. A. Caldwell, Wm. E. Eberhardt, Jr., Fred. Dulaney and others.

COAL MINES AND COKE OVENS

Ark., Fort Smith.—Hartford Valley Coal Corp., capital \$5000, chartered; Jas. B. McDonough, Pres.; S. M. Smith, Secy.-Treas.

Ark., Hackett.—Sunshine Smokeless Coal Co., capital \$25,000, incptd.; Earl Cobb, Pres.; Z. T. Bealy, Secy.-Treas.

Ark., Hackett.—Sun Coal Co., capital \$10,000, incptd.; D. H. Cadmus, Pres.; Earl Cobb, V.-P.; Z. T. Bealy, Secy.-Treas.

Ga., Rome.—Cagle Coal Co., capital \$30,000, incptd. by R. W. Graves, J. N. King, J. E. Dean and W. M. Nixon.

Ky., Covington.—Mason-Harlan Coal & Land Corp., capital \$500,000, chartered by J. W. R. Bradford, John H. Schluster and R. C. Mason.

Ky., Barbourville.—Trace Branch Coal Co. increased capital from \$1000 to \$15,000.

Ky., Bell Jellico.—Dean Branch Coal Co., capital \$25,000, incptd. by W. B. D. C. and P. M. Johnston.

Ky., Dorton.—Kentucky-Elkhorn By-Product Coal Co., Shelbyana, Ky., capital \$50,000, organized by H. L. Cox and others; acquired several thousand acres coal land and will develop; build town for employees.

Ky., Elkhorn City.—Middle Ridge Coal Co. organized; Millard Burk, Pres.; A. J. Younce, V.-P.; G. H. Francisco, Secy.-Treas., all of Pikeville, Ky.; acquired Middle Ridge coal land and will develop.

Ky., Greenville.—Beech Creek Coal Co. increased capital from \$150,000 to \$400,000.

Ky., Hazard.—Kentucky River Coal Mining Co., R. C. Whitsett, Pres. and Gen. Mgr., 608 S. Dearborn St., Chicago, advises Manufacturers Record: Installing mine on new Lotts Creek extension of Louisville & Nashville R. R., Perry County; increased capital from \$100,000 to \$150,000 to purchase additional equipment and build more houses. (Increase of capital lately noted.)

Ky., Lexington.—Defiance Coal Mining Co., capital \$100,000, incptd. by T. C. Jacks, W. E. Davis and H. E. Bollock.

Ky., Lexington.—Elkhorn Coal Co., increased capital from \$100,000 to \$600,000; plans additional improvements.

Ky., Martin.—Black Beaver Coal Co. increased capital to \$75,000; acquired additional coal lands; reported to construct town.

Ky., Mayking.—E. B. Yates, Roanoke, Va., leased coal lands on Pine Creek; reported to develop.

Ky., Pikeville.—Rodgers Bros. Coal Co. increased capital from \$75,000 to \$100,000; will improve plant on Shelby Creek.

Ky., Prestonsburg.—Full Creek Coal Co., capital \$25,000, incptd. by L. Blenkinsopp, A. Fleming and E. A. Layne.

Ky., Regina.—Wolf Pit Coal Mining Co., capital \$20,000, organized by H. L. Adkins and others.

Ky., Robinson Creek.—Uneeda Coal Co., Pikeville, Ky., organized, capital \$20,000; E. E. George, Mgr.

Ky., Sergeant.—Whitley-Elkhorn Coal Co. will install electrical equipment.

Ky., Whitesburg.—S. S. Lawson, Williamsburg, Ky., reported to develop leased coal lands, Elkhorn field.

Ky., Whitesburg.—Mullens Coal & Lumber Co., capital \$5000, incptd. by C. C. Mullens, Clarence R. Gernert, John W. Gernert and others.

Md., Barton.—Pekin Coal Co., capital \$50,000, incptd. by Theo. F. Shaffer, S. Bernard Brydon and Howard P. Brydon.

Mo., Versailles.—H. H. Hanenkratt, Kansas City, Mo., and others purchased 1373 acres coal and fire-clay land for development; use steam shovel to strip overburden; coal 12 ft. from surface.

Tenn., Sequatchie.—Marion Coal & Lumber Co. (lately noted incptd. with \$1,000,000 capital) organized; A. N. Walker, Pres.; Dunnington Yancey, Secy.-Treas., both of 814 James Bldg., Chattanooga; Pres. Walker wires Manufacturers Record: Develop 20,000 acres Marion county coal and timber land near Sequatchie; estimate 40,000,000 ft. hardwood and 10,000,000 ft. pine, poplar and other timber; beginning to cut lumber; install portable sawmills; build 6 to 10 mi. railroad; coal development to follow engineer's report, now being prepared. (See Machinery Wanted—Sawmills; Tractors and Trucks; Rails; Pump; Tank; Mining Equipment.)

Tenn., Sequatchie.—Marion Coal & Lumber Co., Chattanooga, wires Manufacturers

Record: A. N. Oakler, Pres.; develop 20,000 acres coal and timber land in Marion County near Sequatchie; have 40,000,000 ft. hardwood and 10,000,000 ft. pine, poplar and other timber; beginning to cut lumber; install number of portable mills; coal development will follow engineer's report now being prepared. (Under Chattanooga, lately noted incptd. with \$1,000,000 capital.)

Va., Christiansburg.—Anthracite Coal Corp. organized; C. C. Mathey, Pres.-Mgr.; F. W. Mathey, Secy.; both of Galena, Ill.; F. W. Robinson, V.-P., Chicago; A. C. Klettsch, Treas., Milwaukee, Wis.; develop 2500 acres; estimated capacity, 300 tons for 1918, 500 for 1919, 1000 after that year; no machinery needed at present. (Lately noted chartered.)

Va., Norton.—Climch River Coal Co., capital \$25,000, chartered; Lee Kilgore, Pres., Coeburn, Va.; Lee J. Huettell, Secy., Norton.

Va., Norfolk.—White Ash Coal Co., capital \$100,000, incptd.; B. Wellman, Pres., Ferguson, W. Va.; J. L. Noell, Secy., Roanoke, Va.

W. Va., Fairmont.—Jno. Y. Hite purchased and will develop Harrison and Marion County coal land.

W. Va., Mannington.—Rachel Coal Co. will replace compressor, power-house and ventilation system at coal mines, reported burned at loss of \$65,000.

W. Va., Shinnston.—Van Gilder Coal Co., capital \$10,000, incptd. by Ray Van Gilder and others.

W. Va., Welch.—Hubbard Coal Co., capital \$100,000, incptd. by W. P. Sinclair, W. S. Hubbard, T. H. Curd and others.

COTTON COMPRESSES AND GINS

S. C., Kingstree.—Williamsburg Liberty Milling Co., E. C. Burgess, Pres.; will install 4-80 cotton gin; purchased machinery. (See Flour, Feed and Meal Mills.)

Tex., India.—India Farmers' Gin Co., capital \$12,000, incptd. by M. A. Carpenter, E. G. Wickliffe and J. Brigaon.

Tex., McKinney.—Farmers' Gin Co. increased capital from \$10,000 to \$35,000.

COTTONSEED-OIL MILLS

Ark., Texarkana.—Texarkana Cotton Oil & Fertilizer Co. will remodel building.

DRAINAGE SYSTEMS

Fla., Tallahassee.—Drainage Comsn. let contract Johnson & Co. of West Palm Beach, Fla., to construct 10 mi. excavation in Caloosahatchee Canal, between La Belle and Coffee Mill Hammock; deepen present channel from 3 to 4 ft. and widen 5 to 10 ft.

Tenn., Trenton.—Directors of Drainage District No. 6 of Gibson, Weakley and Carroll counties, W. W. Powers, Chrmn., will construct drainage system to reclaim 25,000 acres of farming land; main canal 25 mi. long; width to vary from 35 to 60 ft.; excavation 2,065,000 cu. yds.; estimated cost \$300,000; Drainage Directors receive bids until June 4; Ferree & McCleskey, Engrs., Memphis. (See Machinery Wanted—Drainage System.)

ELECTRIC PLANTS

Okl., Loco.—Loco Light & Fuel Co., capital \$25,000, incptd. by Percy W. Newton and W. H. Rader of Loco, and G. W. Newman of Dixie, Okla.

Okl., Poteau.—Citizens' Consolidated Power & Electric Co. will build power plant; city will soon vote on granting franchise.

Va., Fredericksburg.—State Normal School, E. H. Russell, Pres., let contract to E. G. Hefflin, Fredericksburg, to erect \$20,000 fireproof building; Archt. C. M. Robinson, Richmond, Va.; has let contract for power plant and laundry machinery. (Lately noted.)

FERTILIZER FACTORIES

Ark., Texarkana.—Texarkana Cotton Oil & Fertilizer Co. will remodel building.

FLOUR, FEED AND MEAL MILLS

Ky., Lexington.—Lexington Roller Mills, W. W. Paterson, Supt., will add 2 stories

to present 3-story building; ordinary construction; purchased machinery for corn meal grists and corn flour. (Building contract lately noted let to Combs Lumber Co., Lexington.)

N. C., Laurinburg.—The Hammond Co., R. L. Hammond, Secy.-Mgr., lately noted to rebuild burned flour mill, will erect ordinary frame building; install machinery, daily capacity 200 bbls. (See Machinery Wanted—Flourmill Machinery.)

S. C., Kingstree.—Williamsburg Liberty Milling Co. organized; E. C. Burgess, Pres.; install machinery for 25-bbl. flour mill, also for meal and grists, mill feed and cotton gin; machinery purchased; building contract not yet let. (Lately noted chartered, \$30,000 capital.)

Tenn., Columbia.—Columbia Mill & Elevator Co. increased capital from \$40,000 to \$100,000.

Tex., Fort Worth.—Golden Rod Mills, J. R. Stitt, Pres.-Mgr., 1000 E. 9th St., contemplates remodeling feed plant and installation of new machinery, estimated cost \$15,000.

FOUNDRY AND MACHINE PLANTS

Ala., Birmingham.—Birmingham Machine & Foundry Co. will rebuild pattern department reported burned at \$100,000 loss.

Ala., Birmingham.—Foundry.—Jones-Hernandez Machine & Foundry Co., R. M. Hernandez, Pres., will erect addition for foundry; now operating machine shop.

Fla., Jacksonville.—Foundry.—Mains Foundry Co. will rebuild plant reported burned at loss of \$15,000.

Ky., Louisville.—Storage Batteries.—Rommel-Gossett Co., capital \$10,000, inceptd. by John D. Rommel, W. A. Gossett and W. A. Turner.

Ky., Owensboro.—Forgings.—Owensboro Forging Co., S. K. Ewing, Jr., Secy.-Mgr., will erect 60x250-ft. fireproof or mill-construction building; bids opened May 27; install drop forgings machinery; plans by Clifford Shopell & Co., Evansville, Ind. (Lately noted to rebuild plant reported burned at \$65,000 loss.)

Md., Baltimore.—Machine Shop.—A. Slaysman, 807 E. Pratt St., will build 3-story 55x50-ft. brick construction machine shop; let contract to John H. Kelly, 1208 E. Biddle St.; Callis & Callis, Architects, 2055 Kennedy Ave.; both of Baltimore.

Md., Curtis Bay.—Copper Foundry, etc.—Curtis Bay Copper & Iron Works, capital \$1,000,000, inceptd. by Wm. F. Cechrane of South Baltimore, Md.; M. C. Whitaker of Curtis Bay, Patrick H. Loftus of New York, and others; build plant manufacturing copper and iron products for maritime purposes.

Mo., St. Louis.—Machine Shop.—Medart R. Pulley Co. will remodel machine shop; cost \$5000.

Mo., St. Louis.—Furnaces.—Copper Clad Malleable Range Co. will erect plant building; cost \$2500.

Mo., St. Louis.—Ordnance Tools.—Ordnance Tool Mfg. Co., organized; leased building at 214 Market St.; will equip to manufacture ordnance tools, hubs for artillery and fine dies.

S. C., Charleston.—Agricultural Implements, etc.—Roll-Rite Mfg. Co., capital \$100,000, inceptd. by Geo. R. Fishburne and J. C. Lamb.

Va., Richmond.—Boiler Works.—Newport News Shipbuilding & Dry Dock Co., Newport News, Va., for Emergency Fleet Corp., will build \$4,000,000 plant to manufacture boilers for all Government steamships being constructed along Atlantic seaboard; preparing plans and specifications; selecting site on James River; plant to include foundry, machine shop and boiler shop; electric lighting and power; employ 2000 men in completed plant; construction cost by Emergency Fleet Corp.; Newport News corporation to supervise construction and operate plant.

W. Va., Parkersburg.—Steel Products.—Barker Steel Co., capital \$50,000, inceptd. by G. L. McKim, H. W. Russell and others.

GAS AND OIL ENTERPRISES

Ky., Beattyville.—Lynam Oil & Gas Co., capital \$200,000, inceptd. by Sam Hurst, E. B. Rose, J. E. Jones and others.

Ky., Bowling Green.—Oil Pipe Line.—C. S. Schryver, Lexington, Ky., plans laying oil pipe line from Allen County field to Bowling Green.

Ky., Lexington.—Oil Refinery.—Hecla Oil & Refining Co., capital \$250,000, inceptd. by C. B. Mathis, J. D. Yarrington and C. S. Hudson.

Ky., Louisville.—Jefferson Co-operative Oil Co., capital \$200,000, inceptd. by W. G. Dearing, A. E. Scott, Wallace A. McKay and others.

Ky., Louisville.—Hell Creek Oil Co., capital \$25,000, inceptd. by John F. Oertel, H. J. Kraft and Karl H. Long.

Ky., Winchester.—A-1 Oil Co., capital \$50,000, inceptd. by J. C. Williams, W. E. Curry and E. L. Douglas.

Ky., Winchester.—Erie Oil Co., capital \$60,000, inceptd. by Charles M. Purdy, H. L. Skelley, Geo. E. McCaney and others.

Okla., Ardmore.—Sutherland Petroleum Co., capital \$300,000, inceptd. by P. C. Dings, C. E. Sykes and J. A. Heenan.

Okla., Ardmore.—Oil Refinery.—Ranger Producing & Refining Co., capital \$150,000, inceptd. by L. C. Turnman of Ardmore, W. F. Armstrong of Broken Bow, Okla., and R. C. Scott of De Queen, Ark.

Okla., Butler.—Garber Central Oil & Gas Co., lately noted inceptd., capital \$200,000, will drill for gas and oil. (See Machinery Wanted—Well-drilling Equipment.)

Okla., Delaware.—Wecoolon Oil Co., capital \$50,000, inceptd. by C. H. Willis, C. A. King and Alfred Hampton.

Okla., Drumright.—Winland Oil & Gas Co., capital \$250,000, inceptd. by W. R. Winsell, M. J. Hyland and H. L. Heins.

Okla., Geary.—Wiley Oil & Gas Co., capital \$150,000, inceptd. by A. L. Jackson, J. W. Crothers and F. S. Wallace.

Okla., Kiowa.—Penbrook Oil Co., capital \$50,000, inceptd. by D. G. Lacy, Geo. E. Pinkton and Yom G. Haile.

Okla., Muskogee.—Dixie Oil & Gas Co., capital \$150,000, inceptd. by C. E. Harris and Geo. D. Rogers of Muskogee and J. E. Martineau of Little Rock, Ark.

Okla., Muskogee.—Repeater Oil & Mining Co., capital \$200,000, inceptd. by W. N. Harsha, F. W. Hudson and E. R. Nagle.

Okla., Oklahoma City.—Cushing-Healdton Oil & Gas Co., capital \$300,000, inceptd. by H. K. Richardson, J. G. Marsh and I. R. McCann.

Okla., Oklahoma City.—Youngstown Oil Co., capital \$30,000, inceptd. by Jos. Milam, E. C. Milam and A. N. Satterfield.

Okla., Oklahoma City.—Davis Oil & Gas Co., capital \$50,000, inceptd. by H. O. Davis, Alfred Hardy and L. E. Andrews.

Okla., Tulsa.—Marlow Oil Co., capital \$5000, inceptd. by A. M. McSpaden, C. E. King and D. G. Powell.

Okla., Tulsa.—Oil Refinery.—Little Sioux Oil Co., capital \$1,250,000, inceptd. by J. Dawson and U. H. Hosterman of Tulsa, and O. K. Herndon of Kansas City, Mo.

Okla., Tulsa.—Oil Refinery.—Excelsior Producing & Refining Co., capital \$1,000,000, inceptd. by J. Everett Jones, Clem E. Steen and Jas. G. Copple.

Okla., Tulsa.—Title Oil Co., capital \$100,000, inceptd. by M. Boyer, W. V. Biddison and others.

Okla., Tulsa.—B-M Oil Co., capital \$10,000, inceptd. by T. Baker, I. D. Myers and Ann M. Buckley.

Okla., Walters.—Oil Refinery.—United States Refinery Co. (John S. Alexander, Earl G. Wallace of Oklahoma City and others) purchased 80 acres on which to build \$60,000 oil refinery.

Tex., Beaumont.—J. M. B. Oil Co., capital \$3000, inceptd. by W. G. Josey, L. H. Mothner and H. Bohrer.

Tex., Brenham.—Gas Plant.—Chas. L. Brooks of Ann Arbor, Mich., representing bond holders, purchased gas plant; plans to improve and enlarge.

Tex., Coleman.—Oil Refinery.—Lone Star Oil & Refining Co., Manes Bldg., organized with A. F. Vandersall, Pres.; J. C. Smith, V.-P.; T. N. Shipp, Secy.-Treas.; erect oil refinery; daily capacity 500 bbls.; cost \$60,000; 17-acre site. (Lately noted organized to build oil refinery.)

Tex., Fort Worth.—Oil Refinery.—Ranger-Palo Pinto Oil, Gas & Refinery Co., capital \$300,000, inceptd. by W. H. Ward, M. H. Roberts and R. L. Ray.

Tex., Houston.—Oil-pipe Line.—Petroleum Pipe Line Co. of Texas, capital \$600,000, inceptd. by F. G. Smith, W. E. Long and Sam E. Lane.

Tex., San Angelo.—Superior Oil Co., capi-

tal \$50,000, inceptd. by N. S. Rives, A. L. Lair and T. O. Gorman.

Tex., San Antonio.—Blue Ridge Oil Co., capital \$100,000, inceptd. by A. W. Staitl, A. S. Spencer, Henry G. King, Jr., and others.

Tex., San Antonio.—Oil Station.—Magnolia Petroleum Co. (main office, Galveston, Tex.) will erect oil station; cost \$3000.

HYDRO-ELECTRIC PLANTS

S. C., Lockhart.—Lockhart Flour Co. has not completed plans for hydro-electric development; 16,000 H. P.; I. W. Jones, Consit. Engr., Milton, N. H.; W. D. Dent, Engr. in charge, Lockhart. (Previously noted.)

ICE AND COLD-STORAGE PLANTS

Fla., Vero.—Vero Utilities Co. will build ice-storage plant.

Ga., Augusta.—Georgia-Carolina Dairy Products Co. let contract to Lawrence Construction Co., Augusta, to erect 1-story brick cold-storage warehouse; cost \$5000.

Ga., Swainsboro.—Joe Ehrlich will build cold-storage plant.

Ga., Swainsboro.—Bob Hill will build cold-storage plant.

S. C., Cartersville.—Farmers' Ginning Co., capital \$10,000, inceptd. by A. H. Askins and N. Duncan McNeill.

S. C., Florence.—Florence Ice & Fuel Co., capital \$80,000, inceptd. by J. F. Stackley, O. G. Weston and M. D. Lucas.

LAND DEVELOPMENTS

Fla., Sanford.—Drew Development Co., capital \$25,000, inceptd.; Benj. Drew, Pres.-Treas.; M. O. Overstreet, V.-P.; H. M. Voorhis, Secy.

Ga., Macon.—City, David S. Jones, City Clerk, will vote July 16 on \$15,000 bonds for Central City Park improvements; replacements, etc.

Ky., Martin.—Black Beaver Coal Co. is reported to develop town on recently-acquired acreage. (See Coal Mines and Coke Ovens.)

N. C., Wilmington.—A. J. Hanby will develop residential suburb; grade streets, build granolithic sidewalks, etc.

S. C., Berkeley County.—Pine Grove Live Stock Co., E. W. Durant, Jr., Pres., 514 Peoples Bldg., Charleston, S. C., will develop 1339 acres land; produce corn, oats, hay, cotton, etc. (See Miscellaneous Enterprises.)

LUMBER MANUFACTURING

Fla., Palatka.—Surles & Slaughter Lumber Co. will build saw mill with capacity of 40,000 ft.; purchased 9000 acres timber land. (Lately noted.)

Ga., Milltown.—Milltown Mfg. Co. will rebuild lumber plant reported burned at loss of \$50,000.

Ky., Franklin.—John Burk will rebuild sawmill reported burned.

Ky., Ulvah.—Louisville Point Lumber Co. is reported to develop W. B. Lusk timber boundary; ship rough logs.

La., Alexandria.—Liberty Lumber Co. organized; Ferd Brenner, Pres.; A. O. Davis, V.-P. and Mgr.; R. C. Whitebeck, Secy. (Lately noted inceptd., \$10,000 capital.)

La., Morville.—A. L. Dickey and others of Pelican Lumber Co. purchased lumber plant; present capacity, 15,000 ft.; increase to 25,000 ft. daily; purchase includes hardwood stumpage.

Md., Prince Anne.—Cohn & Bock Co. will rebuild planing mill and box factory reported burned at loss of \$40,000.

Miss., McLain.—Colmer-Green Lumber Co., capital \$50,000, inceptd. by J. J. McIntosh and others.

Miss., Quitman.—Long-Bell Lumber Co. will double plant capacity.

Miss., Waynesboro.—Fagan-Peel Co. will rebuild planing mill reported burned at loss of \$5000, including 100,000 ft. lumber.

Miss., Yazoo City.—Yazoo Lumber Co., capital \$10,000, inceptd. by C. E. Couty, J. B. Webb and J. W. Bransford.

Miss., Valley Park.—Allison Lumber Co., capital \$10,000, organized by H. A. Allison and others.

Okla., Tulsa.—L. S. Cogswell Lumber Co., capital \$40,000, inceptd. by L. S. Cogswell, L. W. Cogswell and C. C. Maddox.

S. C., Newberry.—Newberry Lumber Co. organized; Geo. W. Summer, Sr., Pres.; McK. Hutchinson, V.-P. and Mgr.; J. E. Summer, Secy. and Mgr.; install general

woodworking machinery to cost \$8000. (Lately noted inceptd., \$15,000 capital.)

Tenn., Sequatchie.—Marion Coal & Lumber Co., Chattanooga, wires Manufacturers Record: A. N. Oakler, Pres.; develop 20,000 acres coal and timber land in Marion County, near Sequatchie; have 40,000,000 ft. hardwood and 10,000,000 ft. pine, poplar and other timber; beginning to cut lumber; install number of portable mills; coal development will follow engineer's report now being prepared. (Under Chattanooga, lately noted inceptd. with \$1,000,000 capital.)

Tenn., Sequatchie.—Marion Coal & Lumber Co. (lately noted inceptd. with \$1,000,000 capital) organized; A. N. Walker, Pres.; Dunnington Yancey, Secy.-Treas., both of 814 James Bldg., Chattanooga; Pres. Walker wires Manufacturers Record: Develop 20,000 acres Marion County coal and timber land near Sequatchie; estimate 40,000,000 ft. hardwood and 10,000,000 ft. pine, poplar and other timber; beginning to cut lumber; install portable sawmills; build 6 to 10 mi. railroad; coal development to follow engineer's report, now being prepared. (See Machinery Wanted—Sawmills; Tractors and Trucks; Rails; Pump; Tank; Mining Equipment.)

Tex., Big Wells.—Big Wells Lumber Co., capital \$15,000, inceptd. by A. B. Mayhew, A. C. Mayhew and R. C. Nipper.

Va., Suffolk.—Suffolk Box & Lumber Co., capital \$15,000, chartered; Geo. B. Breon, Pres., Philadelphia; R. V. Johnson, Secy., Suffolk.

Va., Richmond.—Manasota Lumber Corp., capital \$200,000, chartered; Florida S. Crosby, Pres.; H. H. Chalkley, Secy.

Va., Rocky Mount.—B. A. Davis Lumber Co., capital \$50,000, inceptd.; T. J. Dudley, Pres.; H. A. Davis, Secy.

W. Va., Chester.—Chester Lumber Co., capital \$25,000, inceptd. by R. J. McElvray, C. A. Smith and others.

W. Va., Herndon.—Guyan Lumber Co. will rebuild plant reported burned at loss of \$50,000.

METAL-WORKING PLANTS

Fla., St. Petersburg.—Metal and Wooden Specialties.—Worthington Mfg. Co., capital \$50,000, inceptd.; R. B. Worthington, Pres.; Lulu E. Worthington, Secy.; H. D. Werkheiser, Treas.

Va., Fredericksburg.—Metal Egg Crates.—Metal Egg Crate Co., 415 Kenols Bldg., Washington, D. C., let contract to H. G. Hefflin, Fredericksburg, to erect 50x150-ft. brick building; purchased machinery, cost \$10,000.

Va., Norfolk.—Anchor Chains.—American Chain Co. will build (under supervision United States Shipping Board) 2 additional factories; triple capacity of plant; manufacture anchor chains for Government ships under construction.

MINING

Ala., Anniston.—Graphite.—Griesemer Graphite Co. plans to increase capital from \$210,000 to \$300,000.

Ala., Flomaton.—Gravel.—W. T. Taylor Gravel Co., capital \$12,000, inceptd. by J. E. Taylor, W. R. Taylor, John Massey and others.

Ala., Wetumpka.—Graphite.—United States Graphite Co., capital \$300,000, inceptd. by Jno. A. Gaddis of Wetumpka, T. C. Hadley of Montgomery, Ala., and others.

Ark., Cave City.—Manganese.—Connecticut Zinc Co., G. A. Williams, representative, purchased 2000 acres manganese land along Cave Creek; erect washing plants and install several steam shovels.

Georgia—Iron.—Georgia-Tennessee Iron Co., capital \$300,000, inceptd. by F. D. Buck, M. L. Morty and K. E. Longfield, all of Wilmington, Del.

Ky., Hopkinsville.—Fluorspar.—Commodore Fluorspar Co. will mine fluorspar; expects to produce 2000 tons this year; under management Southern Mineral Co., E. V. Rawn, Pres., which produced 6000 tons spar during 1917. (Lately noted inceptd. with \$60,000 capital by E. V. Rawn and others.)

Ky., Paducah.—Clay.—Old Hickory Clay & Talc Co., Fraternity Bldg., organized; C. E. Jennings, Pres.-Mgr.; N. R. Farris, V.-P.; S. F. Howard, Secy.; R. N. Scott, Treas.; develop 40 acres; estimated daily capacity 2 to 3 cars; install gasoline or steam engines, belt conveyor and drag line. (Lately noted inceptd., capital \$25,000.)

Md., Hagerstown.—Glass Sand.—Round Top Glass Sand Co., 14 N. Jonathan St., organized; C. J. Spalding, Pres.; Charles

Dougherty, V. P.; F. Wilbur Bridges, Secy.-Treas.; develop 187 acres; daily output 200 tons. (Lately noted inceptd., capital \$75,000, to build plant to crush glass sand; invest \$20,000 for new machinery.)

Okla., Ada.—American Mills & Mines Corp., capital \$100,000, chartered by R. A. Herring, H. West and others.

Okla., Ardmore—Lead and Zinc.—Idabel Lead & Zinc Co., capital \$50,000, inceptd. by R. A. Walker and Geo. Coffman of Ardmore, and J. T. Hudgins of Woodward, Okla.

Okla., Enid.—Catholic Mission Mining Co., capital \$250,000, inceptd. by W. H. Hall, S. W. Johnson and T. E. Furster.

Okla., Enid.—Win-Co Mining Co., capital \$250,000, inceptd. by K. O. Rieger, R. H. McCulloch and Philip Kates.

Okla., Muskogee.—Repeater Oil & Mining Co., capital \$200,000, inceptd. by W. N. Harsha, F. W. Hudson and E. R. Nagle.

Okla., Oklahoma City—Lead and Zinc.—Virginia Lead & Zinc Co., capital \$100,000, inceptd. by J. Glen Pearson of Oklahoma City, C. S. Dietrick and T. A. Barber of Okmulgee, Okla.

Okla., St. Louis.—Maryland Mining Co., increased capital from \$250,000 to \$350,000.

Tenn., Nashville.—Minerals Mining & Milling Co. chartered with \$25,000 capital by H. E. Graves and others.

Tex., San Antonio—Gravel.—Von Oray Gravel Co., capital \$10,000, inceptd. by W. H. Jennings, L. H. Browne and N. H. Browne.

Va., Norton.—Southern Mines Syndicate, capital \$100,000, chartered; D. Vernon Meakin, Pres.; Earl W. White, Secy.; both of Norfolk.

Va., Stanley.—Manganese.—Shenandoah Valley Manganese Corp., Albert P. Meyer, Secy., has offices in Oliver Bldg., Pittsburgh, Pa.; advises Manufacturers Record: Not now prepared to state development plans. (Lately noted chartered with \$1,500,000 capital.)

MISCELLANEOUS CONSTRUCTION

Ark., Pine Bluff—Dikes, etc.—United States Engr. Office, Bankers' Trust Bldg., Little Rock, will construct mattresses and dikes; bids until June 20. (See Machinery Wanted—Dikes, etc.)

Ark., Siloam Springs—Natorium.—City will erect natatorium. Address The Mayor.

D. C., Washington—Sea Wall.—Bureau of Yards and Docks, Navy Dept., let contract McHarg-Barton Co., 171 Madison Ave., New York, at \$128,380 to construct sea wall.

Fla., Fort Pierce—Dredging.—R. O. Crouch of Grant, Fla., has contract at \$2950 to construct Sebastian Inlet; inlet at ocean level to be 40 ft. wide and 5 ft. deep, and at top 100 ft. wide.

Ga., Savannah—Wharf.—City will construct wharf in upper Savannah harbor, about 2 mi. from Savannah; Board of Purchase, E. R. Conant, Purchasing Officer, receives bids until May 29. (See Machinery Wanted—Wharf Construction.)

Ky., Louisville—Swimming Pool.—Park Board re-let contract to General Construction Co. of Louisville to construct swimming pool in Shelby Park; circular 160 ft. in diam.; separate wading pool for children; cost about \$16,000; Joseph & Joseph, Archts., Louisville; recent contract rescinded. (Lately noted.)

La., New Orleans—Levee.—Lake Borgne Basin Levee Dist. Comms. authorized \$25,000 additional appropriation for levee construction for year to June 30, 1919.

La., New Orleans—Industrial Canal.—Board of Comms., Port of New Orleans, will build industrial canal; J. Devereux O'Reilly, Ch. Engr., 300 New Orleans Court Bldg., advises Manufacturers Record: Construction of lock and canal by board's own forces; canal 5½ mi. long, with width of 150 ft. at bottom and 350 ft. at top; 25 ft. deep at mean low water; actual work begun May 5; probably complete by Dec. 31, 1919; estimated ultimate cost, \$12,000,000; George W. Goethals & Co., Const. Engrs., New York, to design lock and canal. (Lately noted with initial expenditure stated at \$2,600,000.)

Miss., Vicksburg—Levee.—Mississippi River Comm., Third Dist., Vicksburg, has received bid (acceptance recommended) of H. B. Blanks, Room 502, First National Bank Bldg., Vicksburg, on 400,000 cu. yds. levee work (stations 1325 to 1567+33, Lower Yazoo Levee Dist., below Greenville, Miss.), at 39.5 per cu. yd.; cost \$171,700; A. M. Todd, Dist. Engr. (Bids lately noted.)

N. C., Charlotte—Swimming Pool.—

Knights of Columbus, Mr. Marion. Gen. Secy. of War Activities, will construct outdoor swimming pool at Camp Greene; concrete; 100 ft. long; 50 ft. wide; bathhouses.

MISCELLANEOUS ENTERPRISES

Ark., Texarkana—Grain Elevator.—Fouke Grain Co. will erect addition; 2 stories; brick; concrete floor; Y. Rice, Contr.

Fla., Miami—Fisheries.—Consolidated Fish Co., capital \$50,000, inceptd.; Ivan S. Jaudon, Pres.; Paul C. Taylor, V.-P.; L. L. Yelvington, Secy.-Treas.

Ga., Rome—Hardware.—Rome Hardware Co., capital \$100,000, inceptd. by B. T. Haynes, E. D. Smith and R. M. Moss.

Ky., Newport—Dairy.—Hiland Dairy Co., capital \$15,000, inceptd. by John P. Crowley, Geo. B. Hoock, John Sargent and others.

Ky., Bell Jellico—Construction.—C. F. Gleason Construction Co., capital \$50,000, inceptd. by C. F. Gleason, Joe A. Eaton and X. L. Johnson.

Md., Cumberland—Dairy.—Dairymen's Assn. plans erection of co-operative milk distributing and pasteurizing plant; estimated cost \$50,000.

Miss., Moss Point—Contracting.—Moss Point Emergency Building Co., capital \$50,000, inceptd.

N. C., Wilmington—Amusement Park.—Howard-Wells Amusement Co., P. W. Wells, Pres., acquired Greenfield Lake property and will develop for amusement park; expend \$75,000; grade land, enlarge dancing pavilion, erect bathhouses, build riding devices, switchbacks, chute-the-chute, etc.

S. C., Columbia—Refuse Incinerator.—City contemplates building refuse incinerator; T. Keith Legare, City Engr.

S. C., Berkeley County—Cattle, Hogs, etc.—Pine Grove Live Stock Co., 514 Peoples' Bldg., Charleston, S. C., organized; E. W. Durant, Jr., Pres.; A. M. Hills, V.-P. and Mgr.; E. H. Jennings, Secy.; develop 1330 acres (property of Pine Grove Club, Mr. Durant, Pres.) for raising Hereford cattle and Duroc hogs; also grow corn, oats, hay, cotton, etc. (Lately noted inceptd., capital \$75,000.)

Okla., Durant—Grain Elevator.—Durant Grain & Elevator Co. increased capital from \$25,000 to \$75,000.

S. C., Greer—Water and Lighting Systems.—Brookman Bros. Co. organized; J. O. Brookman, Pres.-Secy.; P. V. Brookman, V.-P.; R. H. Bearden, Treas.; deal in fresh water systems, other pumping machinery and lighting plants. (In April, noted inceptd., \$5000 capital.)

S. C., Moncks Corner—Publishing.—Berkeley Publishing Co., capital \$2000, inceptd.; J. Russell Williams, Pres.; E. J. Dennis, V.-P.; Geo. K. Boinnoitt, Secy.-Treas.

S. C., Orangeburg—Publishing.—Orangeburg Sun Co., capital \$10,000, chartered; R. Lewis Berry, Pres.; A. Fields, V.-P.

Tenn., Chattanooga—Plumbing and Electrical.—Chattanooga Plumbing & Electrical Co., capital \$24,000, inceptd. by V. B. White-side, W. C. Teas, P. W. Curtis and others.

Tenn., Columbia—Grain Elevator.—Columbia Mill & Elevator Co. increased capital from \$40,000 to \$100,000.

Tex., Beaumont—Salt Water.—Hardin County Salt Water Co., capital \$100,000, inceptd. by H. C. Weis, M. Guiterman, D. V. Blocker and others.

Va., Fredericksburg—Laundry.—State Normal School, E. H. Russell, Pres., let contract to E. G. Hefflin, Fredericksburg, to erect \$20,000 building; plans by C. M. Robinson, Richmond, Va.; purchased laundry machinery, etc. Lately noted. (See Electric Plants.)

Va., Norfolk—Contracting.—Jackson & Hernandez, capital \$10,000, inceptd.; Albert R. Jackson, Pres.; G. M. Wilbur, Secy.

W. Va., Clarksburg—Electric Products.—Home Electric Equipment Co., 456 Pike St., organized; A. Hattenbach, Pres.; W. S. Waters, V.-P.; both of Pittsburgh, Pa.; H. T. Gates, Secy.-Mgr.; Delco Light products.

W. Va., Beckley—Printing and Publishing.—Raleigh Register Corp. will erect printing plant.

W. Va., Panther—Construction.—Panther Construction Co., capital \$50,000, inceptd. by C. A. Riley, T. C. Morgan and others.

MISCELLANEOUS FACTORIES

Ala., Birmingham—Cigars.—C. C. Snider Cigar Co. increased capital from \$15,000 to \$100,000.

Ala., Birmingham—Bags.—Dixie Bag Mfg. Co., capital 20,000, inceptd.; W. T. Ward,

Pres.; G. T. Stafford, V.-P.; J. F. Peterson, Secy.

Ala., Ensley—Sulphuric Acid.—Steel Cities Chemical Co. will rebuild sulphuric-acid plant reported burned at \$300,000 loss.

Ark., Clarendon.—Ashcraft-Young Mfg. Co., capital \$15,000, inceptd.; Carl Helmstetter, Pres.-Secy.; C. W. Young, V.-P.; Ethel Helmstetter, Treas.

Ark., Little Rock—Picric Acid.—War Dept., Bureau of Ordnance, Washington, D. C., will build \$12,000,000 plant manufacturing picric acid for explosives and dyes; let general contract to Pratt Engineering & Machinery Co., 25 W. 44th St., New York, to construct buildings, furnish and install machinery; Everly M. Davis Chemical Construction Co., 25 W. 44th St., New York, to furnish chemical manufacturing equipment. 1200-acre site; employ 3000 men to building plant; 4000 men when manufacturing at full capacity; Pratt corporation has Little Rock offices in Board of Commerce Bldg., W. C. Whitestone, Field Engr., and C. M. Jones, Purchasing Agent, in charge.

Fla., Jacksonville.—Dixie Refining Co. chartered; capital \$10,000; J. W. Sorgen, Pres.; A. H. Baker, Jr., V.-P.; C. P. Lovell, Secy.-Treas.

Ga., Brunswick—Picric Acid.—Butterworth-Judson Corp., 61 Broadway, New York, under contract with War Dept., will build \$5,000,000 plant to manufacture picric acid for explosives; in addition, invest \$2,000,000 for employees' industrial town; 1400-acre site; plant buildings to cover 500 acres; site on Turtle Island in Turtle River, 3 mi. from Brunswick; Judson company will erect buildings, furnish machinery, install equipment and operate plant after completion; employ 5000 men to build; 6000 to operate.

Ga., Savannah—Monuments.—Capital Monument Co., capital \$10,000, inceptd. by Cecil W. Brannen and J. M. Thayer of Savannah, and S. C. Latham of Statesboro, Ga.

Ga., Tifton—Meat Preservers.—I. D. Morgan & Sons will erect plant to manufacture meat preserves; structure will be 60x124 ft., iron construction; cost \$4000 to \$5000.

Ky., Lexington—Bottling.—Quenche Bottling & Syrup Co., capital \$15,000, inceptd. by Harry T. Kelly, J. E. Wilson and E. P. Downing.

Ky., Louisville—Cylinder Oil.—Lottman Automobile Cylinder Oil Co., capital \$3000, inceptd. by Sebastian Lottman, Jos. H. Waterfall and Ethel Waterfall.

Ky., Louisville—Shirts.—W. H. Duncan & Co., 814 E. Oak St., will establish shirt factory; begin with 30 machines; purchased equipment.

Ky., Louisville—Overalls.—Cyril W. Scott Mfg. Co. will establish overalls and trousers factory.

Ky., Maysville—Shirts, etc.—Maysville Shirt & Dry Goods Co., capital \$50,000, inceptd. by Chas. Rosenstein, A. G. Watson and others.

Ky., Scottsville—Tobacco.—Farmers' Loose Leaf Tobacco Co. increased capital from \$15,000 to \$30,000.

La., Gueydan—Rice.—Nutro Rice Mill will increase capacity to 15,000 bbls. daily; erect 1-story 130x88-ft. addition with composition roof; to rough rice warehouse, install sprinkler system, also 50,000-gal. gravity tank and two 9000-gal. pressure tanks. (See Machinery Wanted—Sprinkler System; Tanks.)

La., New Orleans—Crackers, etc.—Pelican Cracker Factory, E. L. Gerde, Pres., 818 Magazine St., will erect ordinary or mill-construction building, cost \$130,000; date of opening bids not set; has purchased machinery, cost \$60,000; manufacture cakes and crackers. (Lately noted to erect additional bakery.)

Md., Baltimore—Creamery.—Maryland Creamery Co., 1735-32 E. Pratt St., will erect addition; fireproof; 3 stories; 50x30 ft.

Md., Baltimore—Cigarettes.—Lorillard Company, Charles and Barre Sts., leased 4-story warehouse at 716-18 W. German St.; will equip to manufacture cigarettes.

N. C., Reidsville—Tobacco.—J. H. and R. T. Burton will build 130x25-ft. tobacco factory; brick construction.

Okla., Oklahoma City—Candy.—Sifers Candy Co. let contract Campbell & Price, 610 Majestic Bldg., Oklahoma City, at \$90,000 to erect factory; 5 stories; 60x120 ft.; brick and reinforced concrete.

Okla., Oklahoma City—Quality Products Co., capital \$5000, inceptd. by N. Goldberg, R. M. Stanley and Eva Goldberg.

Okla., Tulsa—Lampblack.—Lampblack Mfg. Co., Box 233, will install plant to manufacture lampblack from natural gas. (See Machinery Wanted—Lampblack Machinery.)

Okla., Tulsa.—Tulsa Mfg. Co., capital \$75,000, inceptd. by Ed L. Jones, Remington Rogers and Mary Tate.

S. C., Charleston—Clothing.—Bureau Yards and Docks, Navy Dept., Washington, D. C., let contract to W. T. Hadlow, 4 Baldwin Bldg., Jacksonville, Fla., to erect 1-story 150x60-ft. and 50x30-ft. buildings; wood construction; ready roofing; cost without mechanical equipment, \$26,000; cost of heating plant, \$6000. (Lately noted.)

Tenn., Kingsport—Chemicals.—Federal Dye-stuff & Chemical Corp. contemplates plant enlargement in connection with proposed Government contract.

Tenn., Knoxville—Cases.—Holston Case Co. increased capital from \$300 to \$15,000.

Tenn., Lyles—Wood Alcohol, etc.—Bon Air Coal & Iron Co., W. J. Cummins, V.-P. and Gen. Mgr., Stabilman Bldg., Nashville, Tenn., has final plans and specifications for \$1,300,000 plant; 18-acre site; 350x50 ft. main retort building of brick, steel and corrugated iron; 200 houses for workmen and officials; 20-room hotel; report structure to cost \$800,000; 20 retorts, stillhouse, power-house, etc., to cost \$500,000; purchased machinery; mechanical-chemical equipment being furnished by E. B. Badger & Sons Co., Boston, Harry C. Merriam, Chem. Engr., in charge; burn 300 cords wood daily; produce daily 2000 gals. wood alcohol, 40,000 lbs. acetate of lime and 10,000 bus. charcoal; let general building construction contract to George A. Fuller Co., Fuller Bldg., New York, and Munsey Bldg., Washington, D. C.; construction progressing; probably have plant ready to manufacture by Dec. (Includes some details not in previous announcements.)

Tex., Denison—Silos.—Lone Star Silo Assn., Fort Worth, will build branch works.

Tex., Fort Worth—Peanuts.—Golden Rod Mills, 1600 E. 9th St., J. H. Stitt, Pres.-Mgr., will erect 5-story factory, 5-story storage-house and 1-story warehouse; total cost \$50,000; purchase material and employ labor; purchased peanut hulling machinery, cost \$30,000; daily capacity peanut hulling, 100 tons. (Lately noted.)

Tex., Denton—Peanut Crushing.—Denton Oil & Gin Co., J. W. Roberts, Mgr., will build peanut factory.

Tex., San Antonio—Brewery.—San Antonio Brewing Assn. will erect addition; tile; cost, \$10,000.

Tex., San Antonio—Electric Supplies.—B. V. D. Electric Mfg. Co., capital \$25,000, inceptd. by John R. Herff, Richard C. Blower and Chas. L. Van Dunker.

Tex., Waco—Silos.—Lone Star Silo Assn., Fort Worth, proposes to build branch works; cost \$50,000.

Va., Danville—Tobacco.—Raymond A. Holland Tobacco Co., capital \$50,000, chartered; J. E. Perkinson, Pres., Danville; Raymond A. Holland, Secy., Lancaster, Pa.

Va., Norfolk—Bakery.—Roskam-Beck Baking Corp., 439 Church St., capital \$10,000, chartered; Philip Roskam, Pres.; Otto Beck, V.-P., Secy. and Mgr.; occupy rented building; manufacture cakes and pastries; has opened machinery bids.

Va., Portsmouth—Flavoring Extracts.—Lime Kola Co. will establish flavoring extract factory at 611 Edwards St.

Va., Richmond—Tobacco.—W. H. Winstead Co., capital \$500,000, inceptd.; W. H. Winstead, Pres., 15 W. German St., Baltimore, Md.; F. N. Harrison, Secy., Owensboro, Ky.

Va., Charleston—Splint Glass.—Foy Splint Glass Co., capital \$100,000, inceptd. by L. K. Foy of Fairmont, W. Va.; F. J. Foy of Brownsville, Pa., and C. E. Foy of Irwin, Pa.

W. Va., West Union—Window Glass.—Ideal Window Glass Co. will rebuild plant reported burned at loss of about \$50,000.

MOTOR CARS, GARAGES, TIRES, ETC.

Ark., Little Rock—Garage.—G. H. Clem will erect garage; cost \$1600.

D. C., Washington—Garage.—B. Mason will erect garage at 1730 M St.; cost \$2000; C. H. Langley, Contr., 310 12th St. N. W.

Fla., Miami—Automobiles.—Miami Cadillac Co., capital \$15,000, inceptd.; A. R. Smart, Pres.; Frank B. Shutts, V.-P.; J. E. Junkin, Jr., Secy.-Treas.

Ga., Athens—Motor Cars.—C. A. Trussell Motor Co., capital \$1000, inceptd. by W. D. Bowers and others.

Ga., Macon—Automobiles.—Fountain Dunlap Auto Co., capital \$100,000, inceptd. by R. C. Dunlap, A. Kingman Moore, Leo Hucklebee and others.

Ga., Macon—Garage.—Williams Mfg. Co., Fred W. Williams, Pres., will erect garage; 2 stories; 280x50 ft.; install repair equipment.

Ky., Louisville—Transportation.—Yellow Line Taxi & Baggage Co., capital \$5000, inceptd. by Andrew Johnson, F. L. Clifford, C. A. Holsclaw and J. C. McCoy.

La., New Orleans—Garage.—Demack Motor Car Co. will erect garage; 2 stories; 25,000 sq. ft.

Okl., Idabel—Automobiles.—Idabel Auto Co., capital \$15,000, inceptd. by R. C. Newton, D. G. Flenniken and N. Roberts.

Okl., Stroud—Pneumatic Tires.—Simpson Pneumatic Co., capital \$50,000, inceptd. by Geo. W. Simpson, John Wright and Frank Childs.

Okl., Tulsa—Garage.—John O. Mitchell will erect garage at 24 W. Brady St.; 2 stories; brick; foundation to cost \$4000.

Tenn., Chattanooga—Vulcanizing.—Dume Thompson Vulcanizing Works, capital \$15,000, inceptd. by Claude J. Thompson, W. M. Lasley, Wm. Thompson and others.

Tex., Dallas—Motor Cars.—S. G. Davis Motor Car Co., capital \$100,000, inceptd. by S. G. Davis, E. H. Lavendar and Lang Wharton.

Va., Boydton—Automobiles.—Beales, Bedinger & Gregory, capital \$25,000, inceptd.; M. H. Beales, Pres.; F. C. Bedinger, Secy.

Va., Kilmarnock—Motor Transportation.—Tidewater Rapid Transit Co., O. H. George of Millenbeck, Va., Pres., organized to operate passenger and freight motor transportation routes through counties of Northern Neck, between Rappahannock and Potomac Rivers; main line 160 mi. long, with terminals at White Stone and Reedville. (Lately noted inceptd., \$100,000 capital.)

Va., Richmond—Automobile Supplies.—General Auto Supply Co., capital \$15,000, inceptd.; Henry Schwarzschild, Pres.; N. Rutenberg, Secy.

RAILWAY SHOPS, TERMINALS, ROUNDOUSES, ETC.

W. Va., Glenwood—Baltimore & Ohio R. R., H. A. Lane, Chief Engr., Baltimore, Md., will build locomotive repair shops; cost \$1,700,000; 2500 tons steel shapes for buildings; let building contract to Westinghouse-Church-Kerr Co., 30 Church St., New York.

W. Va., Grafton—Baltimore & Ohio R. R., H. A. Lane, Chief Engr., Baltimore, Md., let contract to Frairie Bros. & Hargley, 18 Clay St., Baltimore, to erect 12-stall engine-house of brick and frame construction; Archt., M. A. Long, Room 1215, Baltimore & Ohio Bldg., Baltimore. (Lately noted to build roundhouse and turntable.)

W. Va., Huntington—Chesapeake & Ohio Ry., F. I. Cabell, Chief Engr., Richmond, Va., will expend \$500,000 for improvements and extensions to car and locomotive repair shops; has plans and specifications; probably build erecting shop and additional unit for machine shop; has begun yard improvements costing \$75,000 to \$100,000. (These betterments are portion of Chesapeake & Ohio \$18,000,000 improvement budget approved by Director-General McAdoo.)

ROAD AND STREET WORK

Ala., Florence.—City will pave with bitulithic, construct sidewalks, curb and grade Court and Water Sts.; R. E. Mende, City Engr., receives bids until June 4; date postponed from May 7; lately noted. (See Machinery Wanted—Paving, etc.)

Ala., Florence.—City plans to vote on bonds to improve streets. Address The Mayor.

Ala., Rockford.—Coosa County will construct 5.8 mi. Turnpike Road, being part of State Trunk Road No. 10, between Speed and Rockford, Ala.; 5 acres clearing and grubbing; 36,493 cu. yds. earth excavation; 2500 cu. yds. solid rock excavation; 139 cu. yds. concrete; 1600 ft. vitrified pipe; 22,320 ft. lumber; 1150 ft. piling; 16,104 cu. yds. top soil; County Commrs. receive bids until June 24; W. S. Keller, State Highway Engr., Montgomery. (See Machinery Wanted—Road Construction.)

Ala., Montgomery.—Montgomery County Board of Revenue will improve old Hayneville Road from Carter Hill Road to old Pike Road; 5 mi.

Ark., Glenwood.—Caddo Highway (or Glenark Cut-off Pike of Arkansas), Graham Burnham of Burnham Engineering Co., Glenwood, Ark., promoter, contemplates building 110 mi. road through southwest Arkansas, in Pike, Montgomery, Clark, Garland

and Hot Springs counties, etc.; preliminary plans by Burnham Engineering Co.; connections of road to include junction at Joplin, Mo., with Ozark Trail, also with Jefferson Highway, St. Louis-Oklahoma City Highway, etc.

Ark., Camden.—City will pave streets in business district and Washington St. through residence section. Address The Mayor.

Ark., Clinton.—Van Buren County Commissioners, J. W. Hatchett, Pres., Clinton, issued \$85,000 bonds to construct 30-mi. road.

Ark., Morrilton.—Conway County Commrs. (C. E. Cruce, Secy.), Road Improvement District No. 1, will construct 32½ mi. graded road; work includes 150,000 cu. yds. grading, 250 cu. yds. plain and 500 cu. yds. reinforced concrete, 360-lin.-ft. steel bridge, 3000-lin.-ft. pipe culvert; receives bids office of State Highway Commrs., State Capitol, Little Rock, until June 29; Parkes Engineering Co., Dist. Engr., Citizens' Bank Bldg., Pine Bluff, Ark. (See Machinery Wanted—Road and Bridge Construction.)

Fla., Dade City.—Pasco County Commrs. will surface 7500 lin. ft. roadway; 12 ft. wide; bids until June 3; plans, specifications, etc., on file office Circuit Court Clerk. (See Machinery Wanted—Road Construction.)

Fla., Lake Alfred.—City, J. F. Jester, Clerk, will construct 15,000 sq. yds. asphalt concrete paving, 25,000 sq. yds. clay foundation and 48,000 cu. yds. earth excavation; also concrete curb and gutters; bids until May 31; J. W. Turner, Engr., Lakeland, Fla. (See Machinery Wanted—Paving.)

La., Springville.—Livingston Parish Police Jury approved plan for system of roads throughout parish to include main highway connecting with roads of East Bayou Rouge and Tangipahoa Parishes; contemplate election to vote on tax.

Md., Ellicott City.—State Roads Comsn., Frank H. Zouck, Chmn., 601 Garrett Bldg., Baltimore, will construct Baltimore and Washington Blvd. in Howard County; 900 ft. 20-ft. concrete roadway from Guilford Cross Roads, about station 166, southerly; 2000 ft. 30-ft. concrete roadway from Waterloo northerly; 5000 ft. 20-ft. concrete roadway from Wesley Grove southerly; 73,800 ft. 2-ft. concrete shoulders from Patuxent River at Laurel to beginning of 900-ft. concrete section, from Guilford cross roads to Waterloo, from 2000-ft. section of concrete road to 5000-ft. section at Wesley Grove and from Wesley Grove to Elkridge Church; bids until May 29; State Roads Comsn., lately noted under Md., Baltimore, as having report from J. N. Mackall, Chief Engr., estimating cost of repairing Baltimore-Washington Blvd. at \$30,000 to \$350,000. (See Machinery Wanted—Road Construction.)

Miss., Yazoo City.—Yazoo County, Dist. No. 3, will construct 28 mi. road as follows: Benton Road, 7.88 mi.; Anding Road, 17.71 mi.; River Road, 9.02 mi.; Dist. Highway Commrs., T. H. Craig, Chmn., receives bids until June 5; G. R. Thomas, Engr., Yazoo City. (See Machinery Wanted—Road Construction.)

Mo., Hannibal.—City let contract Wilson, Yeoman & Snyder at \$17,000 to repave Market St.

Mo., Harrisonville.—Cass County will improve 12 mi. State Road from Harrisonville to Pleasant Hill; Project No. 8 18.2; grading, surfacing with waterbound macadam, oiling earth shoulders and constructing culverts; macadam surfacing to be 9 ft. wide, except for ¾ mi. which is to be 16 ft. wide; County Commrs. receive bids until June 3; Ben D. Preter, Engr., Harrisonville. (See Machinery Wanted—Road Construction.)

Mo., Independence.—Jackson County Commissioners let contract J. A. Sheedy of Kansas City at \$19,964 to grade Levasy-Mecklin Road, 5½ mi.

Mo., Independence.—Jackson County Commissioners opened bids to construct 2-mi. road from Cement City to oil refinery at Sugar Creek, Davidson Bros. of Kansas City being lowest bidders at \$43,270; also to grade and macadamize 1-mi. road Pasco-Dodson extension, from 80th St. and Prospect Ave. to 85th St. and Woodlawn Ave.; C. Gidinsky of Kansas City lowest bidder at \$16,330.

N. C., Clinton.—Town contemplates \$36,000 bond issue for additional street paving, sidewalk paving, curbs, gutters and drains. Henry A. James, Town Clerk and Treas.

Okl., Drumright.—City, W. E. Nico-demus, Mayor, will construct 50,000 yds. brick pavement; let contract June 3; Ray Flood, City Engr. (See Machinery Wanted—Paving.)

Okl., Muskogee.—Muskogee County will construct gravel road on West Okmulgee Ave. Road, from west city limits 4½ mi.; shaping and preparing sub-grade; 11,000 cu. yds. gravel; clay binder; County Commrs. received bids until May 27; T. P. Clonts, County Engr. (See Machinery Wanted—Road Construction.)

Tenn., Lynchburg.—Moore and Bedford Counties will soon construct 12 mi. road, estimated cost \$69,000; contract to be let by State Highway Dept., J. J. Murray, Secy., Nashville. (See Tenn., Winchester.)

Tenn., Manchester.—Dept. of Highways, J. J. Murray, Secy., Nashville, Tenn., is considering bid of Solomon Construction Co., Harriman, Tenn., on 5.7 mi. road construction, Coffee County, at about \$45,000; bids lately noted. (See Tenn., Winchester.)

Tenn., Shelbyville.—Bedford and Moore Counties will construct 12 mi. road, estimated cost \$69,000; contract to be let by State Highway Dept., J. J. Murray, Secy., Nashville. (See Tenn., Winchester.)

Tenn., Winchester.—Dept. of Highways, J. J. Murray, Secy., Nashville, Tenn., advises Manufacturers Record: State Highway Dept. will soon let contract to construct 8.5 mi. road (Federal aid work) in Franklin County, estimated cost \$80,000; 12 mi. construction in Moore and Bedford Counties, estimated cost, \$69,000; considering bid of Solomon Construction Co., Harriman, Tenn., for 5.7 mi. in Coffee County, estimated cost \$45,000; Cooke County road plans not formulated. (Some of this work previously noted.)

Tex., Archer City.—Archer County Commissioners ordered election for June 15 to vote on \$200,000 bonds to construct roads.

Tex., Comanche.—Comanche County votes June 12 on \$350,000 bonds to construct roads. Address County Commrs.

Tex., Eastland.—Eastland County, Road Dist. 1 and 2, Cyrus R. Frost, County Judge, will (upon sale of bonds) have \$290,000 available for macadam road construction; Henry E. Elrod Co., Engr., Dallas, Tex. (Previously noted.)

Tex., Gonzales.—Gonzales County, Dist. No. 4, is reported to have voted \$10,000 bonds to construct roads. Address County Commrs.

Tex., Meridian.—Bosque County voted \$40,000 bonds to construct roads. Address County Commrs.

Tex., Wharton.—Wharton County Commrs. ordered election for June 22 to vote on \$30,000 bonds to construct roads.

Va., Fredericksburg.—War Dept., Lieut.-Col. Richard, Camp Commander, Camp Humphreys, will build 10 mi. concrete road connecting Camp Humphreys, Alexander, Va., and Washington; 30 ft. width; concrete 8 in. thick in center of highway.

Va., Luray.—Page County Suprvs. will issue \$5000 bonds to improve road between Bentonville and Brownstown in South River Dist.; also plans to issue \$5000 bonds to improve Royal Ave., from Main St. to Riverton.

Va., Richmond.—City will improve Government road from Gillies Creek to National Cemetery; repairs to consist of filling holes with asphaltic mixture and further application of asphaltic paint or seal coat and chips; Chas. E. Bolling, City Engr., receives bids until May 31. (See Machinery Wanted—Road Repairs.)

Va., Roanoke.—City will improve streets and sidewalks; F. L. Gibboney, City Engr., prepared plans and specifications.

SEWER CONSTRUCTION

Ala., Sheffield.—City Commrs., Allen J. Roulhac, Chmn., ask bids until June 18 to construct sanitary sewers; R. A. Chapman, City Engr. (See Machinery Wanted—Sewer Construction.)

Ala., Florence.—City plans to vote on bonds to improve sewer system. Address The Mayor.

Ga., Macon.—City, David S. Jones, City Clerk, will vote July 16 on \$15,000 bonds for sanitary and storm sewer extensions.

Miss., Pascagoula.—City appropriated \$10,000, City of Moss Point \$7000, and \$8000 is available from U. S. Government, making total of \$25,000, for construction of sanitary sewers; survey by W. S. Leathers, State Health Officer, D. J. Williams of U. S. Public Health Service, etc., and Dr. Ludlow, Sanitary Engr., Emergency Fleet Corp. Address The Mayor. (City lately noted contemplating sewer construction.)

Miss., Moss Point.—City appropriated \$7000 for sewer construction. Address The Mayor. (See Miss., Pascagoula.)

Mo., Pleasant Hill.—City let contract Lynch & McDonald, Moberly, Mo., at \$37,765 to construct 5 mi. 8 to 12-in. vitrified clay sewer pipe and sewage-disposal tank.

Mo., St. Louis.—City will construct Bulwer Ave. joint district sewer; Board of Public Service, Room 208, New City Hall, receives bids until June 11. (See Machinery Wanted—Sewer Construction.)

S. C., Fountain Inn.—Board Public Works, D. M. Garrett, Chmn., will construct sanitary sewer and water systems; bond issue \$75,000; bids until June 6; J. N. Ambler, Consit. Engr., Winston-Salem, N. C. See Water-works. (See Machinery Wanted—Water-works and Sewers.)

Tex., Austin.—City, A. P. Woodbridge, Mayor, will vote June 18 on \$100,000 bonds for sewage-disposal plant. (Lately noted.)

Tex., Fort Worth.—Tarrant County Commissioners voted \$1000 and \$1000 equipment to improve sanitary conditions within 5 mi. of Camp Bowie.

Tex., Hillsboro.—City, Wm. H. Knight, Mayor, voted \$25,000 bonds for sewer disposal system. (Lately noted.)

Tex., Stamford.—City, R. L. Penick, Mayor, lately noted as voting \$35,000 sewer bonds, advise Manufacturers Record: Expect to take over present sewerage plant and make slight extensions; city is also making (extensive) water-works improvements. (See Water-works.)

Va., Roanoke.—City will improve sewer system; F. L. Gibboney, City Engr., prepared plans and specifications.

SHIPBUILDING PLANTS

Ala., Mobile—Steel Steamships.—Russell M. Thompson and Thos. J. Kelly of Alabama Dry Docks & Shipbuilding Co. will organize \$100,000 company to build shipyard on Blakeley Island; purchased site.

Ala., Mobile—Concrete Steamships.—Emergency Fleet Corp., Chas. M. Pletz, V.-P., Washington, D. C., will build plant to construct concrete steamships; 4 ways; 750-ton vessels; oil tankers with unlined hulls; employ 1000 men.

Fla., St. Petersburg—Pleasure Boats.—Avery-Roberts Marine Ways Co., capital \$20,000; A. P. Avery, Pres.; Geo. L. Roberts, V.-P.; Howard Frazer, Secy.; O. G. Hestand, Treas.; acquires Avery-Roberts shipyard; will improve plant; construct small pleasure boats.

La., New Orleans—Barges.—Bates & Rogers Construction Co., Civil Engrs. and Contrs., 37 W. Van Buren St., Chicago, also of Cleveland, Ohio, and Spokane, Wash., may build shipyard for large construction; C. V. Burghart, Secy., Chicago, advises Manufacturers Record: Nothing definite to state now. (Lately noted contemplating construction of shipyard.)

Md., Sparrows Point—Steel Steamships.—Bethlehem Steel Corp. contemplates \$2,000,000 expenditure to construct 4 additional ways with accompanying facilities; for 15,000-ton steel steamships.

Va., Newport News—Steel Steamships, etc., Newport News Shipbuilding & Dry Dock Co. may enlarge plant 50 per cent.; Emergency Fleet Corp. is considering plan for this addition.

TELEPHONE SYSTEMS

Ky., Deering.—Deering Telephone Co. (lately noted inceptd.) organized; A. B. Johnson, Pres.; install switchboard for 3 lines; operate 25-mi. line; machinery mainly purchased. (See Machinery Wanted—Telephone Switchboard.)

Okl., Hooker.—Hooker Southern Telephone Co., capital \$1500, inceptd. by H. N. Kelly, W. T. Kirk and J. C. Burks.

Tenn., Yorkville.—Yorkville Telephone Co. increased capital from \$1000 to \$14,970.

Tenn., Jonesboro.—Pleasant Valley Telephone Co., J. A. Diehl interested, will construct 10 mi. metallic telephone line to Johnson City. Lately noted as having plans. (See Machinery Wanted—Telephone Equipment.)

Tex., Langes Hill.—Langes Hill Telephone Co. increased capital from \$2000 to \$6000.

Va., Maybrook.—Maybrook Mutual Telephone Co., capital \$10,000, inceptd. to build 300-mi. telephone system; Jacob F. Williams, Pres., Pembroke, Va.; Elmer B. Stiff, Secy., Maybrook.

TEXTILE MILLS

N. C., Winston-Salem—Hosiery.—Carolina Mills will erect 3-story 100x75-ft. brick mill—construction building costing \$50,000; has equipment to knit hosiery; let contract to Fogle Brothers Co., Winston-Salem.

La., New Orleans—Cotton Products.—New Orleans Cotton Mill & Mfg. Co. will build 3-story structure costing \$23,000; H. N. Moody, Contr., New Orleans.

N. C., Concord—Hosiery.—Hoover Hosiery Co. will establish plant; leased building; install knitting machinery with electric-power drive; daily capacity 300 doz. pairs hose. (Lately noted chartered, capital \$50,000, by A. R. Hoover and others.)

N. C., Monroe—Cotton Products.—J. C. Sikes, E. C. Carpenter and M. K. Lee, Monroe, N. C., will organize \$150,000 company to establish cotton mill; secured 3-story factory building; ordered textile machinery.

N. C., Wendell—Cotton Yarn.—Wendell Spinning Co., capital \$25,000, inceptd. by J. Q. Gant of Burlington, N. C., Kenneth Gant of Neuse, N. C., and J. E. Gant of Altamahaw, N. C.

S. C., Rock Hill—Hosiery.—Liberty Hosiery Co. organized; J. C. Cauthen, Pres.; Treas.; C. L. Cobb, V.-P.; J. B. Creighton, Secy.; leased building; install 50 knitting machines with electric-power drive; purchased equipment; daily capacity 300 doz. pairs hose. (Lately noted inceptd. with \$25,000 capital.)

Tenn., Athens—Hosiery.—Liberty Hosiery Mill, R. J. Fisher, Propr., will build plant; 100x40-ft. structure; install knitting machinery for hosiery.

Tenn., Benton—Hosiery.—W. T. Bidwell and others will build hosiery-knitting mill; 2-story brick structure; install 50 knitting machines.

Tenn., Madisonville—Hosiery.—Sweetwater Hosiery Mills, Jno. M. Jones, Secy.-Treas., Sweetwater, Tenn., will establish branch plant; has building and machinery; install 40 knitters. (Supersedes recent item.)

Va., Pulaski—Hosiery.—Paul Knitting Mills will erect 1-story brick addition with steel window frames and sash; 6000 sq. ft. floor space; install machinery to finish hosiery; erect another structure to be equipped for dyeing hosiery; enlarge boiler-house; daily capacity 1000 doz. pairs hosiery; ordered machinery; total expenditure \$75,000; let building contract to C. H. Hoback, Pulaski. (Previously noted to build dyeing and finishing plant.)

WATER-WORKS

Ala., Florence—City plans to vote on bonds to improve water-works. Address The Mayor.

Ala., Piedmont—City will construct additional reservoir with capacity of 300,000 gals. Address The Mayor.

Ark., Rison—Fordyce Light & Water Co., Fordyce, Ark., has municipal franchise to construct water-works; lay 12 blocks of mains and install 10 fire hydrants.

Mo., Belton—W. A. Pickering, 1005 R. A. Long Bldg., Kansas City, will install plant of 50,000 gals. daily capacity; erect frame and reinforced concrete building; electric pumping machinery; 25,000,000-gal. reservoir; installation to include cast-iron pipe water-mains, sewer, septic tank; Architects, Shepard, Farrar & Wiser, R. A. Long Bldg.; Engr., Henric Lowry Engineering Co., 222 Commerce Bldg., Kansas City. (Lately noted.)

Okla., Kingfisher—City voted \$50,000 bonds to construct water system. Address The Mayor.

Okla., Vian—City issued \$10,000 bonds to extend water system; F. C. Purcell, City Clerk.

S. C., Columbia—City will construct concrete foundations for pumps and walls of buildings, valve pits and floors at water-works plant; 43 cu. yds. pump foundation, 90 cu. yds. wells, 250 sq. yds. floor, excavation and filling; bids until June 11; Fred. C. Wise, Engr.-Supt. (See Machinery Wanted—Concrete Work.)

S. C., Fountain Inn—Board Public Works, D. M. Garrett, Chrmn., will construct water-works and sanitary sewers; bond issue \$75,000; bids until June 6; J. N. Ambler, Const. Engr., Winston-Salem, N. C. See Sewer Construction. (See Water-works and Sewers.)

Tex., Gorman—City is reported to rebuild pump-house and tank of water system reported burned. Address The Mayor.

Tex., San Antonio—City will lay water mains on Jones Ave. and Olymplan; H. Holland, City Engr.

Tex., Stamford—City, R. L. Penick, Mayor, further advises Manufacturers Record as to water-works construction: Build concrete dam across Clear Fork of Brazos River, 16 mi. distant, installing 20-in. reinforced concrete pipe line; standpipe at

dam; gravity flow to city; install filtration plant; contemplates taking over present private-ownership water plant. (Lately noted voting \$440,000 bonds for water supply.)

W. Va., Marlinton—City votes May 27 on \$6000 bonds to erect brick building at water and electric light plant. J. W. Milligan, Mayor.

WOODWORKING PLANTS

Ala., Leeds—Cooperage.—Leeds Cooperage Co. (R. F. Culverhouse and others) will build plant; purchased machinery; R. G. Bullard, Contr., Bremen, Ga.

Ala., Mobile—Novelties, etc.—S. A. Adams, of Mobile, and G. F. Leit of Jackson, Ala., leased building on St. Anthony St. near Royal; will install novelty and cabinet plant; has equipment.

Ark., Lepanto—Shingles.—W. C. Dawson will rebuild shingle plant burned at loss of \$10,000.

Ark., Little Rock—Barrels, etc.—Little Rock Barrel & Box Co., 1420 E. Sixth St., organized; R. H. McNair, Pres.; manufacture tight and slack barrels, also boxes of various kinds. (Lately noted inceptd., \$20,000 capital.)

Fla., Daytona—Crates, etc.—Daytona Crate Co., capital \$50,000, inceptd. to manufacture crates, boxes and barrels; T. F. Williams, Pres.; A. B. O'Hara, V.-P.; A. S. Derby, Secy.-Treas.

Fla., St. Petersburg—Wooden and Metal Specialties.—Worthington Mfg. Co., capital \$50,000, inceptd.; R. B. Worthington, Pres.; Lulu E. Worthington, Secy.; H. D. Werkheiser, Treas.

Ga., Macon—Cooperage.—Massee Cooperage Co., capital \$250,000, inceptd. by W. J. Massee, O. J. Massee, Jr., Geo. W. Morningstar, E. S. Felner and T. D. Massee.

Md., Princess Anne—Boxes.—Cohn & Bock Co. will rebuild box factory and planing mill reported burned at loss of \$40,000.

Mo., Morehouse—Handles.—Hanna-Young Handle Co. will rebuild plant reported burned.

N. C., Sandy—Veneer.—Lumbree Veneer Co., Alma, N. C., inceptd., \$25,000 capital; A. J. McKinnon, Pres.; A. J. Kincaid, V.-P.; both of Maxton, N. C.; J. H. Taylor, Secy.-Mgr., Alma; has plant.

S. C., Cheraw—Veneer.—Clement Ross Mfg. Co. will rebuild veneer plant reported burned at loss of \$75,000.

Tenn., Morristown—Wagons.—Carver Wagon Co. will establish additional plant; purchased and now remodeling building; has machinery.

Va., Suffolk—Boxes.—Suffolk Box & Lumber Co., capital \$15,000, chartered; Geo. B. Breon, Pres., Philadelphia; R. V. Johnson, Secy., Suffolk.

FIRE DAMAGE

Ala., Birmingham—Birmingham Machine & Foundry Co.'s pattern department; loss \$100,000.

Ala., Ensley—Steel Cities Chemical Co.'s sulphuric acid plant; loss \$300,000.

Ark., Little Rock—Mrs. Isaac Kemper's residence, owned by Mrs. B. Alexander, 1022 W. 6th St.; loss \$2500 to \$3000.

Fla., Jacksonville—Mains Foundry Co.'s plant; loss \$15,000.

Fla., Leesburg—Mrs. M. D. Stivender's residence.

Fla., Peters.—L. K. Reed & Co.'s warehouse; loss \$15,000.

Ga., Hawkinsville.—E. C. Smith's residence and garage; loss \$5000.

Ga., Milltown—Milltown Mfg. Co.'s lumber plant; loss \$50,000.

Ky., Hickman—Charles Roberts' barn near Woodland Mills, 8 mi. from Hickman.

Ky., Bowling Green.—John R. Winlock's residence.

La., New Orleans.—B. Leverich's residence; loss \$3500.

Md., Baltimore.—Geo. Ramming's garage and warehouse, 2708 Harford Ave.; loss \$5000.

Md., Pleasant Hill, R. D. from Childs.—Jesse F. Clements' residence; loss \$4000.

Md., Princess Anne.—Cohn & Bock Co.'s planing mill and box factory; loss \$40,000.

Miss., Purvis.—Phillips' boarding-house; T. W. Cooper's residence; Acme Restaurant; W. H. Magee's residence; plant of Purvis News, owned by Miss Duck Wall; loss \$10,000.

Miss., Waynesboro.—Fagan-Peel Co.'s planing mill, including 100,000 ft. lumber; loss \$5000.

Mo., Morehouse.—Hanna-Young Handle Co.'s plant.

N. C., High Point.—Broadway Theater, owned by D. Rones; loss \$4000 to \$5000.

N. C., Chadbourn.—R. D. Connor's residence.

S. C., Charleston.—J. E. McQuade's storage building; loss \$4000.

S. C., Cheraw.—Clement Ross Mfg. Co.'s veneer plant; loss \$75,000.

S. C., Fort Motte.—Parsonage of Methodist Church. Address The Pastor.

S. C., Moore.—R. W. Bridwell's residence near Anderson's mill.

Tenn., Bethel.—A. W. Griffin's barn.

Tex., Gorman.—Pumphouse and tank of water system. Address The Mayor.

Tex., Waco.—T. V. Carroll's residence; loss \$3000.

Tex., Waco.—Hay barn at Quartermasters' Dept., Camp MacArthur; loss \$7000; Lieut. Col. E. H. Andres, Quartermaster, Camp MacArthur.

Va., Tacoma.—Green Oak Coal Co.'s commissary, 1 mi. from Tacoma; loss \$5000.

W. Va., Herndon.—Guyan Lumber Co.'s plant; loss \$50,000.

W. Va., Mannington.—Rachel Coal Co.'s compressor, power-house and ventilation system at coal mines; loss \$65,000.

W. Va., West Union.—Ideal Window Glass Co.'s plant; loss about \$50,000.

COLLAPSED

Fla., Jacksonville.—E. O. Painter Fertilizer Co.'s chemical warehouse.

DAMAGED BY STORM

Tex., Everman.—Masonic Hall and other buildings.

Tex., Fort Worth.—School building in Pantego Dist., Tarrant County. Address School Trustees.

WRECKED BY EXPLOSION

Ky., Franklin.—John Burk's sawmill.

BANK AND OFFICE

Ga., Nicholls.—Merchants & Farmers' Bank has plans by J. L. Bouchillon, Nicholls, for bank building to replace structure lately noted damaged by fire; 100x75 ft.; brick; composition roof; wood floors. Address owner.

La., Sicily Island.—Sicily Island State Bank, W. S. Peck, Pres., will erect bank building; bids opened May 24. Address Mr. Peck. (Lately noted.)

Md., Baltimore.—Security Storage Trust Co. will improve building at 13-19 W. North Ave.; contractors estimating are: Wm. T. Childs, 14x16 W. North Ave.; B. F. Bennett Building Co., 123 Elsinor Ave.; Cowan Building Co., 106 W. Madison St., and Ferdinand Barre, 819 Equitable Bldg.; all of Baltimore.

CHURCHES

Ark., Arkadelphia.—Presbyterian Church will erect Sunday-school annex; 14 classrooms; cost \$7000. Address The Pastor.

D. C., Washington.—Columbia Heights Christian Church, J. H. Bangs, Secy., 1628 Columbia Road, has plans by M. R. Rhoads, Chambersburg, Pa., for building on Park Road; 80x97 ft.; brick and stone; slate roof; fireproof and cork floors; city lighting; cost \$75,000; steam heat, \$3000; date opening bids not set. Address Mr. Bangs. (Previously noted.)

Fla., West Palm Beach.—Holy Trinity Parish, Rev. L. A. Wye, Rector, advises Manufacturers Record that lately-noted building will not be erected at present.

Ky., Louisville.—First Church of Christ, Scientist, will erect brick building at Third and Ormsby Aves.; cost \$241,000. Address The Reader.

Ky., Thornton.—Elkhorn Collieries Co. will erect church building, etc. (See Dwellings.)

Ky., Mayfield.—First Methodist Episcopal Church has plans by R. H. Hunt, Chattanooga, Tenn., for building; 1 story; cost about \$70,000; K. B. Wickersham, Chrmn., Bldg. Committee.

Okla., Frederick.—Baptist Church will remodel building; cost \$3000. Address The Pastor.

Tex., Dallas.—Elbethel Baptist Church will erect building; brick; cost \$12,000. Address The Pastor.

Tex., Dallas.—St. John's Baptist Church, 1919 Allen St., has plans by W. A. Rayfield & Co., Birmingham, Ala., for lately-noted institutional church; 44x66 ft.; brick and tile; composition roof; pine floors; cost \$10,000. Address Rev. C. C. Harper, Pastor, 2905 Thomas Ave. (See Machinery Wanted—Heating Apparatus; Building Materials; Hospital Equipment; Seating; Moving-picture Equipment; Wall Board.)

Va., Berkley, P. O. Norfolk.—Mt. Zion Baptist Church will erect building to replace burned structure; brick; cost \$17,000 to \$20,000. Address The Pastor.

CITY AND COUNTY

D. C., Washington.—Storehouse.—District Commrs. are having plans prepared for storehouse for electric department; cost about \$9000.

Ga., Macon—Auditorium, etc.—City votes separately July 16 on \$55,000 bond issue to erect auditorium, and on \$75,000 bond issue to erect hospital; David S. Jones, City Clerk.

Mo., St. Louis—Bandstand, etc.—Board of Public Service, Wm. T. Findly, Secy., receives bids until May 31 to erect bandstand and comfort station in Clifton Heights Park, installing plumbing and drainage, also heating.

Okla., Pauls Valley—Courthouse and Jail, Garvin County, R. H. Lewis, Clerk, has plans by J. Hicks, Durant, Okla., and will soon let contract to erect courthouse and jail; cost \$150,000. (See Courthouses.)

Tenn., Chattanooga—Soldiers' Club and Auditorium.—E. D. Herron, Commr., Public Utilities, Grounds and Buildings, Room 25, City Hall, receives bids until June 3 for excavation, rubble masonry and concrete footings used in erection of soldiers' club and auditorium at A and 10th Sts.; auditorium to seat 3300; shower baths, dormitory, cafeteria, gameroom, etc.; soldiers' club on first floor; auditorium above; fireproof; brick; limestone trim; hot-air heat; cost about \$50,000; plans and specifications at office C. E. Bearden, First National Bank Bldg., and Clarence E. Jones, Hamilton National Bank Bldg., both of Chattanooga. (Previously noted.)

BUILDING NEWS

BUILDINGS PROPOSED

APARTMENT-HOUSES

Fla., Miami.—John Frohock has plans by Ewd. A. Nolan, Miami, for store and apartment-house; 3 stories; 2 stores on first floor; 4 apartments each on second and third floors; construction in charge of W. A. Otter, Miami. (See Stores.)

Md., Baltimore.—Chas. L. Fulton, 232 St. Paul St., purchased residence at Park and Lafayette Aves., and will convert into apartment-house.

Mo., St. Louis.—Geo. Pomeroy will erect two 2-story tenements; cost \$12,000.

N. C., Durham.—W. D. Hester indefinitely postponed erection of apartment-house on West Main St.; plans by Linthicum & Linthicum, Durham, call for structure 48x278 ft.; cost \$70,000. (Previously noted.)

Okla., Enid.—Luther & Green will erect

apartment-house on N. Independence St.; 3 stories; brick veneer; cost \$10,000.

Tex., Fort Worth.—B. M. Mehl will expend \$3000 to repair apartment-house, 1124 Henderson St.

ASSOCIATION AND FRATERNAL

D. C., Washington.—National War Work Council, Y. W. C. A., Gertrude Mayo, 690 Lexington Ave., New York, will erect temporary lodging-house near munition factories; accommodate 150 to 200; also permanent building at 13th and I Sts. (See Government and State.)

Ga., Fort Oglethorpe.—National War Work Council, Y. M. C. A., New York, will erect association building in Chickamauga Park; type A-3; auditorium with wing; latter used for nurses; W. J. White, Constr. Supt., Fort Oglethorpe.

Tex., Beaumont.—Poor Farm.—Jefferson County has plans by Babin & Beck, Beaumont, for dormitory at poor farm; cost \$4000.

W. Va., Martinsburg.—Fire Station.—City indefinitely postponed erection of fire station on South Virginia Ave.; 25x40 ft.; brick walls; asbestos shingle roof; wood floors; direct steam heat; C. E. Kent, Archt., Martinsburg. (Lately noted to receive bids until May 21.)

COURTHOUSES

Okl., Pauls Valley.—Garvin County, R. H. Lewis, Clerk, has plans by J. Hicks, Durant, Okla., and will soon let contract to erect courthouse and jail; 4 stories; 80x90 ft.; brick, stone and reinforced concrete; cost \$150,000. (Previously noted.)

Tenn., Chattanooga.—Treasury Dept., Washington, D. C., opened bids to remodel and extend courthouse and postoffice. G. Becking, Chattanooga, is lowest bidder at \$78,690. (See Government and State.)

DWELLINGS

Ala., Attalla.—O. C. Smith will probably rebuild in the fall residence lately noted damaged by fire.

Ark., Little Rock.—J. P. Buchanan has plans by John P. Almand, Little Rock, for residence; frame; 7 rooms; cost \$4500.

Ark., Little Rock.—E. J. Carter has permit to erect 2-story brick-veneer residence, 211 Pulaski St.; cost \$5000; also to repair residence, 2017 W. 6th St.; cost \$500.

Ark., Little Rock.—B. L. Ulmer will erect 1-story bungalow; cost \$2500.

D. C., Washington.—O. Phillips, 1721 New Jersey Ave. N. W., will erect 1-story dwelling at 2727 Thirtieth St. N. W.; cost \$3300.

D. C., Washington.—Boss & Phelps have plans by A. H. Sonneman, 1334 H St. N. W., Washington, for sixteen 2-story dwellings on 41st St. N. W.; cost \$104,000.

D. C., Washington.—Harry A. Kite, 1338 G St. N. W., has plans by Waggaman & Ray, Washington, for 4-story dwelling at 1904 R St. N. W.; cost \$15,000; also erect frame dwellings at 2691-47 Twelfth St. N. E.; cost \$12,000.

D. C., Washington.—John L. Knopp will erect four 1½-story frame dwellings at 1896-12 Lawrence St. N. E.; cost \$12,000; construction by owner.

D. C., Washington.—T. A. Jameson, 61 New York Ave. N. W., has plans by W. E. Howser, Washington, to erect eight 2-story brick dwellings at 1300-14 Randolph St.; cost \$30,000; construction by owner.

D. C., Washington.—Housing Bureau of Department of Labor is considering sites to erect 4 dormitories for war workers; 3 stories; terra cotta and stucco. (See Government and State.)

Fla., Jacksonville.—United States Shipping Board, Emergency Fleet Corp., J. Rogers Flannery, Director of Housing, 1319 F St., Washington, D. C., will build model city on south side to house shipbuilders; is having plans prepared by H. J. Klutho, Jacksonville, for 1400 to 2200 bungalows. (See Government and State.)

Fla., Miami.—G. Mather will erect 2 residences; cost \$8000.

Fla., St. Petersburg.—Mrs. C. W. Hewitt purchased Russell property on First Ave. and will improve.

Ga., Atlanta.—J. B. Daniel will erect two 2-story brick-veneer and stucco dwellings, 466-68 N. Jackson St.; 10 rooms; cost \$14,000.

Ga., Atlanta.—Mrs. H. Shouderby has plans by M. F. Morris, 525 Atlanta National Bank Bldg., Atlanta, for residence; 6 rooms; frame, shingle and stucco construction; composition shingle roof; pine, oak and tile floors; hot-water heat; electric lights; cost \$5000; construction by day labor. (Lately noted.)

Ga., Stone Mountain.—Dr. W. T. McCurdy has plans by M. F. Morris, 525 Atlanta National Bank Bldg., Atlanta, for residence; 9 rooms; 2 stories and basement; frame and brick veneer; composition shingle roof; pine, quartered oak and tile floors; tile and stone mantels; tile baths; steam heat; electric lights; cost \$7000; construction by day labor. Address owner. (Lately noted.)

Ky., Danna, P. O. at Roxana.—Smoot Creek Coal Co. will build 50 additional miners' houses at new plant near Danna; will let contracts at once.

Ky., Danna, P. O. at Roxana.—Kentucky & West Virginia Coal Co. will let contract at once to erect 75 additional miners' houses at Smoot Creek plant.

Ky., Hazard.—Kentucky River Coal Mining Co., R. C. Whitsett, Pres., 608 S. Dearborn St., Chicago, increased capital stock from \$100,000 to \$150,000 to purchase additional equipment and erect more houses.

Ky., Louisville.—Wm. Young will erect cottage; frame; cost \$3000.

Ky., Thornton.—Elkhorn Collieries Co. will let contracts at once to erect 300 miners' houses on Thornton Creek; also erect church, school and welfare building. Address A. B. Ewen, Mgr.

La., New Orleans.—A. Denis will erect two 1-story dwellings; cost \$4000.

Md., Dundalk.—Dundalk Company, Edw. H. Bouton, Pres., St. Helena, Md., will erect 531 buildings (dwellings and about 10 boarding-houses) for employees of Bethlehem Steel Co.; cost, including some street work, grading, etc., about \$2,000,000; following contractors invited to estimate: Consolidated Engineering Co., Calvert Bldg.; H. D. Watta Co., Garrett Bldg.; Seth H. Luthicum, 229 St. Paul St.; Edward L. Scheldenhelm, 5th Ave.; Gladfelter & Chambers, 36th and Kind Ave.; all of Baltimore; A. R. Whitney Co.; Mark C. Tredennick Co., 331 Madison Ave.; Powers-Kennedy Co., 149 Broadway; all of New York; Roydhouse-Arey Co., Fidelity Bldg.; Cramp & Co., Deneckla Bldg.; Warren Moore & Co., Commercial Trust Bldg.; R. E. Brocklehurst; Irwin & Leighton, 125 N. 12th St., all of Philadelphia; bids received until June 1; plans and specifications by Edward L. Palmer, Jr., 513 N. Charles St., Baltimore. (Lately noted inviting estimates, but these recalled.)

N. C., Charlotte.—J. H. Cutter has plans by Chas. C. Hook, Charlotte, for residence; cost \$8000 to \$8000; construction in charge of R. N. Hunter, Charlotte.

N. C., Durham.—I. Gordon plans to erect residence at Roxboro and Holloway Sts.

N. C., Monroe.—J. C. Sikes and others will organize \$150,000 company to establish cotton mill; will erect 25 dwellings for operatives.

Okl., Enid.—H. W. Trippett will erect residence; 1 story; frame; cost \$3000.

Okl., Oklahoma City.—E. Highfield will erect residence; frame; cost \$2500.

Okl., Oklahoma City.—W. L. Thurman will erect two 2-story dwellings; cost \$5500 each.

Okl., Tulsa.—O. Hollison will erect 3 residences at 1128, 1138 and 1134 S. Elgin St.; cost \$4000 each.

Okl., Tulsa.—R. H. Josey will erect dwelling; cost \$2500.

Okl., Tulsa.—S. M. Bell will erect \$4000 residence.

Okl., Tulsa.—Mrs. Emma Young will erect \$10,000 residence.

Okl., Tulsa.—Alice C. Dilbrick will erect dwelling; cost \$3000.

Okl., Tulsa.—J. H. Roberts will erect 3 dwellings, 422 and 494 S. Victor St. and 1715 E. Katy St.; cost \$3000 each.

Okl., Tulsa.—G. C. Packard will erect 2 dwellings; cost \$3000 each.

S. C., Georgetown.—Jno. A. Miller, Nazareth, Pa., purchased "Etherville Plantation" near Georgetown and is reported to make extensive improvements.

Tex., Beaumont.—H. Sanders has plans by C. A. Logan, Beaumont, for residence; 2 stories; hollow tile and stucco; cost \$5000.

Tex., Beaumont.—J. O. Banks is receiving bids to erect 2-story hollow tile and stucco residence; cost \$9000; W. King, Archt.

Tex., El Paso.—H. L. Birney will erect 2-story brick residence; cost \$5500.

Tex., Fort Worth.—Dr. G. R. Williams will erect 1-story frame dwelling; cost \$2495.

Tex., Fort Worth.—Mrs. K. S. Brantley will erect dwelling; 1 story; frame; cost \$3750.

Tex., Fort Worth.—L. L. Slager will erect 1-story frame residence; cost \$4500.

Tex., Fort Worth.—J. B. Lanarie will erect frame residence; cost \$2500.

Tex., Fort Worth.—J. Slopps will erect residence; frame; cost \$2400.

Tex., Fort Worth.—W. K. McKey will erect residence; brick veneer; cost \$6000.

Tex., Fort Worth.—W. S. Smith will erect residence; brick; cost \$9000.

Tex., Fort Worth.—E. F. Cooper will erect dwelling; brick; cost \$8300.

Tex., Houston.—Houston Land Corp. will erect 5-room stucco bungalow and garage on Graustark Ave., and 3-room brick-veneer dwelling and garage on Branard St.; cost \$3000 and \$4500, respectively.

Tex., Houston.—Russell Brown Co. will

erect 6-room frame residence and garage; cost \$3300.

Tex., Orange.—Orange Development Co. organized with \$100,000 capital with L. Miller, Pres.; Lee Woodworth, V. P. and Gen. Mgr.; will erect number of dwellings.

Tex., Ozona.—H. P. Vaughn will erect \$5000 residence.

Tex., San Antonio.—J. M. Oldham will erect three 5-room dwellings on Coffman St.; cost \$5000.

Tex., San Antonio.—Dr. Aureliano F. Urrutia will erect residence; hollow tile; 14 rooms; cost \$30,000.

Tex., San Antonio.—W. A. Harborth will erect 6-room dwelling; cost \$3000.

Tex., San Antonio.—Naylor Jones will expend \$5000 for roof and alterations to dwelling.

Tex., San Antonio.—J. A. Bessler will erect residence; 5 rooms; cost \$2200.

Tex., San Antonio.—Tom Papas will erect 5-room dwelling; cost \$3000.

Tex., San Antonio.—W. A. Baity will erect 5-room dwelling, 1804 Mulberry St.; also 5-room dwelling, 1792 Agartia St.; cost \$2300 and \$3000, respectively.

Va., Norfolk.—Harvey L. Lowenberg will erect dwelling; brick; cost \$12,000.

Va., Norfolk.—Lowe & Sawyer will erect 2 frame dwellings; cost \$3500 each.

GOVERNMENT AND STATE

D. C., Anacostia.—Magazine.—Bureau of Yards and Docks, Navy Dept., Washington, received only bid to erect magazine building from Baker Dunbar, Alden Co., Stock Exchange Bldg., Philadelphia, at \$6550 for work complete. (Lately noted.)

D. C., Washington.—United States Coast and Geodetic Survey, R. L. Faris, Acting Supt., receives bids until June 12 to erect building; drawings and specifications at office of Mr. Faris.

D. C., Congress Heights.—Rifle Range.—Adjutant-General, D. C. Militia, 472 L St. N. W., Washington, receives bids until June 3 to erect temporary buildings at National Guard rifle range; plans and specifications at above office.

D. C., Washington.—Dormitories.—Housing Bureau of Department of Labor is considering following sites to erect 4 dormitories for war workers: Plaza, between Union Station and Capitol, 2 squares bounded by 14th, 15th and B Sts. and Ohio Ave. N. W., portion of Monument grounds and Potomac Park; 3 stories; terra cotta and stucco; structure to be erected on plaza to house 5000, and building on Potomac Park about 1500.

D. C., Washington.—Y. W. C. A.—National War Work Council, Y. W. C. A., Gertrude Mayo, 600 Lexington Ave., New York, will erect temporary lodging-house near munition factories; contain recreation hall, dining-room with seating capacity 1000, etc.; accommodate 150 to 200; will also erect permanent building at 13th and I Sts.; contain lecture-rooms, gymnasium, swimming pool, etc.

Fla., Jacksonville.—Dwellings.—United States Shipping Board, Emergency Fleet Corp., J. Rogers Flannery, Director of Housing, 1319 F St., Washington, D. C., will build model city on south side to house shipbuilders; is having plans prepared by H. J. Klutho, Jacksonville, for 1400 to 2200 bungalows; 4, 5 and 6-room type; park in center; \$500,000 appropriation.

Ga., Fort Oglethorpe.—Y. M. C. A.—National War Work Council, Y. M. C. A., New York, will erect association building in Chickamauga Park; type A-3; W. J. White, Constr. Supt., Fort Oglethorpe. (See Association and Fraternal.)

Md., Bethesda.—Laboratory.—Bureau of Animal Industry, Agricultural Dept., Washington, D. C., received only bid to erect concrete and frame laboratory building at United States Experimental Station from V. T. H. Bien, 1419 G St. N. W., Washington, at \$13,100. (Lately noted.)

Tenn., Chattanooga.—Postoffice and Court-house.—Treasury Dept., Jas. A. Wetmore, Acting Supervising Archt., Washington, D. C., opened bids to remodel and extend postoffice and courthouse; G. Becking, Chattanooga, is low bidder at \$78,660 for work complete. (Previously noted.)

Tex., Laredo.—Mess Hall.—Cantonment Division, War Department, Washington, D. C., will soon let contract to erect mess hall at Fort Mackintosh; cost about \$31,000.

Va., Arlington.—Laboratory.—Department of Agriculture, Washington, D. C., receives bids until June 18 to erect reinforced con-

crete laboratory building on Arlington Experimental Farm; 60x140 ft.; 2 stories and basement; plans and specifications at office Public Roads and Rural Engineering, 515 14th St. N. W., Washington.

Va., Lee Hall.—Balloons School.—War Department, Washington, D. C., will soon let contract to erect balloons school to cost \$90,000.

HOSPITALS, SANITARIUMS, ETC.

Ga., Macon.—City votes July 16 on \$75,000 bonds to erect hospital. (See City and County.)

Ky., Louisville.—Red Cross Sanatorium will erect frame building at 1430 S. Shelby St.; cost \$3000.

Mo., Mexico.—Audrain County is having plans prepared by B. C. Elliott, Mexico, for \$75,000 hospital. (Previously noted.)

N. C., Dix Hill.—State Hospital for the Insane, Dr. Albert Anderson, Supt., temporarily postponed erection of building for kitchen, butcher shop and bakery; Harry Barton, Archt., Greensboro, N. C. (Previously noted.)

Tex., Palestine.—International & Great Northern Ry., O. H. Crittenden, Ch. Engr., Houston, will not erect \$50,000 hospital as previously reported, but will expend \$10,000 to remodel and improve present building.

Tex., Sweetwater.—Dr. A. W. Canfil will remodel 30-room sanitarium.

Va., Chase City.—Mecklenburg Springs Co., Inc., delayed indefinitely erection of buildings for sanitarium and rural recuperative retreat for convalescents. (Previously noted.)

HOTELS

Ala., Montgomery.—Mrs. D. P. West will improve old Windsor Hotel for store building.

Md., Havre de Grace.—Chas. J. Baker, Lancaster, Pa., purchased Susquehanna Inn, under construction, and will form company to complete structure.

Okl., Coalgate.—O. B. Clevenger will erect hotel.

Okl., Hockerville.—J. A. Wilkins will erect hotel; concrete; cost \$20,000.

MISCELLANEOUS

Ga., Pineora.—Clubhouse.—H. C. Pritchard and others plan to erect clubhouse and golf course.

Ky., Thornton.—Welfare.—Elkhorn Collieries Co. will erect welfare building, etc. (See Dwellings.)

N. C., Wilmington.—Amusement Park.—Howard-Wells Amusement Co., P. W. Wells, Pres., leased Greenfield Lake property, near Wilmington, and will develop for amusement park; will enlarge dancing pavilion, erect bathhouses, riding devices, switchbacks, chute-the-chutes, etc.; total cost about \$75,000. (See Miscellaneous Enterprises.)

S. C., Greenville.—Home.—Board of Trustees, E. A. Gilliam, Chrmn., will establish boarding home for girls, to be known as Martha Davenport Home; brick; stone trim; cost \$32,000.

Tex., Beaumont.—Clubhouse.—Hoo Hoo Club will erect clubhouse; rustic structure; W. A. Priddle is interested.

Tex., San Antonio.—Canteen.—Salvation Army will erect canteen; cost \$8000.

RAILWAY STATIONS, SHEDS, ETC.

S. C., Blacksburg.—Southern Railway Co., R. Herman, Chief Engr., M. W. & S. Lines East, Charlotte, N. C., is reported to erect \$50,000 passenger station; 2 stories.

SCHOOLS

Ala., Florence.—City will issue bonds to improve schools; R. E. Meade, City Engr.

Ala., Ozark.—City has plans by Frank Lockwood, Montgomery, Ala., for graded school building previously noted; 14 classrooms and auditorium; brick; roofing and flooring not decided; cost about \$40,000; steam heat, \$2500; city lighting; bids opened in 3 weeks; address F. S. Howell, Secy. Building Committee. (See Machinery Wanted—Building Material; Heating; Roofing; Cement; Brick.)

Ala., Tyler.—Tyler School Dist. will erect \$2500 school building; J. A. Minter is interested.

Ark., Havana.—Havana Special High School Dist. voted tax to erect \$30,000 building; M. M. Nelson and Burt Walkup, directors.

Ark., Paragould.—School Board, M. W. Shaver, Pres., has plans by J. E. Shane to erect proposed school building; 8 rooms.

Ark., Magnolia.—City School Board will remodel school building; cost \$10,000.

Fla., Fort Green.—School Trustees, W. R. Gramling, Pres., Arcadia, Fla., will erect brick school building; cost 17,000; construction under supervision of W. C. Robertson & Co., Contrs., Fort Meade, Fla.

Fla., Mt. Dora.—Mt. Dora School Dist. is considering election on bonds to erect school building; cost about \$25,000. Address Dist. School Trustees.

Ga., Harlem.—City voted \$10,000 bonds to erect school; J. T. Olive, Mayor.

Ky., Thornton.—Elkhorn Collieries Co. will erect school building, etc. (See Dwellings.)

Miss., McComb.—City, B. E. Butler, City Clerk, will repair South McComb school by city force account; construction under supervision of and materials purchased through Xavier A. Kramer, Archt., Magnolia, Miss. (Previously noted.)

N. C., Goldsboro.—Goldsboro Township voted \$25,000 bonds to erect 2 schools; lately noted; 6 or 8 rooms; brick; steam heat; vacuum cleaning system; cost \$20,000; will petition Legislature for authority to issue \$150,000 bonds to erect main building next year. Address Geo. C. Royall, Chrmn. School Board. (See Machinery Wanted—Heating Plant; Vacuum Cleaner.)

N. C., Greensboro.—City Board of Education is considering election on \$75,000 bonds to fund \$50,000 debt and provide for improvement to school buildings; J. Norman Wills, Chrmn.

S. C., Abbeville.—Public School Dist. No. 26, Abbeville County, voted \$4000 bonds to erect graded school building; S. M. Beaty, Chrmn. Board of Trustees. (Lately noted.)

S. C., Bishopville.—Beaverdam School Dist. No. 27 of Lee County votes June 8 on \$2500 bonds to erect school building; J. C. Joyner, J. L. Elmore and W. F. Hancock, Trustees.

S. C., Bennettsville.—Smith-Deborah School Dist. No. 30 plans to levy tax to erect and equip rural graded school; A. C. Douglas and Jas. McQuage, Trustees.

Tenn., Athens.—Athens Hosiery Mills, R. J. Fisher, Prop., will erect school building for employees.

Tenn., Nashville.—Board of Education of Davidson County receives bids about July 1 to erect Central High School; cost about \$50,000.

Tex., Blythe.—Blythe Public School Dist. voted \$10,000 bonds to erect brick school building. Address Dist. School Trustees. Lately noted.)

Tex., Bullard.—School Board has plans by C. H. Leinbach, 1105 Southwestern Bldg., Dallas, for 2-story brick school; bids received until May 27.

Tex., Cameron.—Milan County School Board consolidated Rice, Hoyt and Oak Dale Dist., and will call election on bonds to erect school building.

Tex., Fort Worth.—Pantego School Dist. Trustees, Tynon County, will rebuild school building noted damaged by fire; brick.

Tex., Cresson.—Cresson School Board, S. E. Holmes, Secy., has \$8000 bond issue for school building. (Lately noted.)

Tex., Itabena.—Board of Trustees, A. B. Reese, Secy., receives bids until June 3 to erect school building; 41x62 ft.; brick; composition roof; frame floors; steam heat; electric lights; cost \$10,000; plans and specifications at office M. M. Alsop, Archt., Clarksdale, Miss., and Mr. Reese as above. (Lately noted.)

Tex., Redwater.—G. L. Lee receives bids until June 3 to erect 2-story brick school building.

Tex., Victoria.—Hood School Dist. voted \$9000 bonds to erect rural high school; Geo. M. Crutsinger, County Supt., Victoria.

Va., Callands.—Callands Dist. School Board receives bids until June 1 to erect school building; plans and specifications at office O. P. Ramsey, Chatham, Va.

Va., Richmond.—Richmond College, F. W. Boatwright, Pres., will erect laboratory on Broad St.

STORES

D. C., Washington.—A. Schulte, 116 Sixth Ave., New York, leased portion of building at 15th and New York Ave. and will remodel, installing new fixtures, showcases, etc., for cigar store.

Fla., Miami.—John Frohock has plans by Edw. A. Nolan, Miami, for store and apart-

ment-house; 3 stories; reinforced concrete; 50x85 ft.; 2 stores on first floor to have plate-glass fronts; 4 apartments each on second and third floors, also porch 8 ft. wide on both floors; cost \$25,000 to \$30,000; construction in charge of W. A. Otter, Miami.

Ky., Bowling Green.—Parsons & Scoville Co., Evansville, Ind., lately noted to remodel store building and erect warehouse, advises Manufacturers Record that company will not build this year.

Ky., Louisville.—Peaslee-Gaulbert Co. will erect addition to building at 413 W. Main St.; cost \$4000.

Ky., Louisville.—Ballard & Ballard Co. will erect addition to building at Campbell St. and Broadway; cost \$2500.

La., New Orleans.—A. F. Pugh will remodel 2-story frame building; cost \$5100.

Mo., St. Joseph.—Townsend & Ueberrhein Clothing Co., 6th and Felix Sts., is having plans prepared by Eckels & Aldrich, 1105 Corby-Forshee Bldg., St. Joseph, for store building; initial structure, 3 stories; ultimate height, 10 stories; 60x120 ft.; steel and reinforced concrete; cost about \$100,000.

Mo., St. Louis.—Annetta Realty Co. has permit to erect 1-story store; cost \$20,000.

Mo., St. Louis.—Harry Freund will erect addition to store building; cost \$4000.

Okla., Tulsa.—Stahl & Myers will erect store; 2 stories; brick; cost \$4000.

Tex., Brownwood.—Hemphill-Fain Co. will expend \$5000 to remodel business building.

Tex., Electra.—W. H. Jackson has plans by Madorie & Field, 500 K. & K. Bldg., Wichita Falls, Tex., for 2-story brick business building; cost \$12,000.

Tex., El Paso.—Staley Bevans will expend \$2000 for roofing and other repairs.

Tex., Fort Worth.—Carter Grocery Co. will repair building, 215 W. 15th St.; cost \$3000.

Tex., San Antonio.—G. C. Sauer will remodel building 125 Crockett St.; cost \$2500.

BUILDING CONTRACTS AWARDED

APARTMENT-HOUSES

Ark., Little Rock.—A. L. Smith let contract to erect apartment-house at 19th and Main Sts.; 2 stories; frame; 2 four-room suites; cost \$10,000.

Tex., Houston.—J. H. Crocker let contract to W. A. Lang to erect apartment-house, Walker and Hamilton Sts.; 2 stories; hollow tile; cost \$10,000.

BANK AND OFFICE

Ark., Little Rock.—People's Savings Bank let contract to remodel building at Second and Main Sts.

Ark., Texarkana.—Merchants & Planters' Bank let contract to H. H. Brown & Co., Texarkana, to erect 2-story brick annex, 111 E. Broad St. (Previously noted as having plans prepared by S. Moore, Texarkana, for remodeling bank building.)

Mo., St. Louis.—A. Gilbert & Sons Brass Foundry Co. let contract to Duffner & Stecker, 722 Chestnut St., St. Louis, to erect addition for office and shipping-room; 2 stories; 25x40 ft.; brick and joist construction; Barrett specification roof; joist floor construction; cost \$3000; A. W. Black & Son, Archts., 621 Security Bldg., St. Louis. (Lately noted.)

N. C., Charlotte.—Charles T. Wills, Inc., 286-S. Fifth Ave., New York, general contractor to erect bank building for Charlotte National Bank, let following sub-contracts: Fireproof arches, J. W. Haas; granite, J. J. Morton Co.; plumbing, Henry Hackney; electric work, F. E. Robinson; all of Charlotte; terra-cotta, Federal Terra-Cotta Co.; plastering, P. J. Durcan, Inc.; carpentry, Jos. Szabo & Co.; hardware, Yale & Towne Mfg. Co.; exterior painting and decorating, J. R. Brimmer Co.; tile, D. H. McLaury Tile Co.; structural steel, Bigelow & Nichols; heating, General Fire Extinguisher Co.; models, Reed Studios; clocks, E. Howard Clock Co.; cork floors, Hasbrouck Flooring Co.; ornamental iron, John Polachek Bronze & Iron Works; waterproofing, Tuttle Roofing Co.; all of New York; exterior glass, Pittsburgh Plate Glass Co., Pittsburgh, Pa.; interior glass, Thomas Jones Decorative Glass Co., Brooklyn, N. Y.; roofing and sheet-metal work, Norman-Seton, Inc., Winfield, L. L. N. Y.; marble, Hilgartner Marble Co., Baltimore, Md.; vault, York (Pa.) Safe & Lock Co.; plans by Alfred C. Bosson, 306 Fifth Ave., New York, call for building 44x115 ft.; 1 story at present; provision for additional

Va., Richmond.—Henrietta Behla will build new front and alter store building; cost \$6000.

THEATERS

Ark., Hartford.—C. Hall will erect addition to Yale Theater.

La., Alexandria.—Beauregard Amusement Co. Incptd. with \$7500 capital by Milton De Roos, Pres.; Mick Manteris, V.-P.; Steve Manteris, Treas.; Henry F. Hibshman, Secy.

Miss., Lexington.—Earle M. Hooke will remodel building for picture theater; 40x71½ ft.; 2 stories; frame; composition roof; wood floors; stove heating; city electric lighting; concrete sidewalks; construction begun. (Lately noted.)

Tex., Beaumont.—Gordon Estate, Perstein Bldg., has plans by C. A. Logan, Keith Bldg., Beaumont, for moving-picture theater; 50x140 ft.; lobby 60 ft.; concrete and tile; composition roof; concrete and tile floors; cost, including equipment, \$40,000; contract to be let by June 1; construction begins July 1. Address J. C. Clemmons, Sol E. Gordon and Juo. I. Pittman, all of Beaumont.

WAREHOUSES

Ky., Bowling Green.—Parsons & Scoville Co., Evansville, Ind., lately noted to erect warehouse and remodel store building, advises Manufacturers Record that company will not build this year. (See Stores.)

Okla., Tulsa.—Orra E. Upp, 330 Mayo Bldg., has plans by United Realty Co., Tulsa, for merchandise storage building; 25x140 ft.; 1 stories and basement; concrete; gravel roof; concrete floors; cost \$125,000; construction begun by day labor. (Previously noted.)

Okla., Tulsa.—Jarecki Manufacturing Co. will erect warehouse; brick; cost \$3500.

Tex., San Antonio.—Muegge Jenuil Storage Co. will erect warehouse; concrete and tile; cost \$31,000.

stories later; Doric style; 9 stone columns, 5 ft. in diam. and 29 ft. high; windows about 25 ft. long; leaded glass dome in center of banking-room; mezzanine floor; fireproof and burglarproof vaults and safes; reported cost \$200,000. (Previously noted.)

N. C., Greensboro.—American Exchange National Bank let contract at \$37,000 to W. W. Dick, Greensboro, for heating and ventilating building for which J. L. Crouse, Greensboro, has general contract at \$197,000; plans by Raleigh James Hughes, Greensboro, call for 9 stories; reinforced concrete skeleton curtain walls; 52x106 ft.; faced with granite for low base, with Indiana limestone columns on street fronts 3½ ft. in diam.; concrete slab and composition roof; 97 offices; contracts for marble work, elevators and vaults not let. (Lately noted.)

Tex., Dallas.—Morton Milling Co. let contract to G. W. Hewett, Dallas, to erect 2-story brick office building, 920 Cadiz St.; cost \$6000.

Tex., Fort Worth.—Louis Cohen let contract to Mr. Hart, Fort Worth, to erect office and warehouse building at Pacific and Oak Sts.; 2 stories; 40x70 ft.; brick; gravel roof; wood and concrete floors; hand elevator; cost \$7000; W. G. Clarkson, Archts., Fort Worth. (Lately noted.)

Tex., Fort Worth.—Texas State Bank let contract to W. C. Hedrick Construction Co., Fort Worth and Dallas, to erect 2-story addition to building at 9th and Houston Sts.; 75x95 ft.; composition roof; concrete floors; steam heat; cost \$45,000; elevators, about \$15,000; Sanguinet & Staats, Archts., Fort Worth. (Lately noted.)

Tex., Ranger.—Farmers & Merchants' State Bank let contract to J. M. Morgan, Big Springs, Tex., to erect bank building; cost \$21,000; David S. Castle, Archt., Abilene, Tex. (Lately incorrectly noted at Raleigh, N. C.)

CHURCHES

D. C., Washington.—Holy Trinity Parish let contract to Boyle-Robertson Construction Co., 1516 H St. N. W., Washington, to build wall at 36th and O Sts.; cost \$6500; Frank G. Pierson, Archt., 918 Washington L. & T. Bldg., Washington.

La., Alexandria.—Emanuel Baptist Church, Rev. D. F. Lawrence, Pastor, let contract to Hudson Construction Co., Ltd., Alexandria, to erect Sunday-school building; 60x90

ft.; 3 stories; brick; frame interior; composition roof; wood floors; low-pressure steam heat; cost \$80,000; Favrot & Livaudais, Ltd., Archt., Title Guarantee Bldg., New Orleans. (Lately noted.)

Mo., St. Louis.—B'Nai Amoona Congregation let contract to E. Luecke, 6919 Plateau Ave., St. Louis, to erect building; 3 stories; 62x81 ft.; cost \$50,000; A. Meyers, Archt., 7th and Locust Sts., St. Louis. (Lately noted.)

Tex., Honey Grove.—Eighth Street Methodist Church will erect building. Address The Pastor.

Tex., Huntsville.—Methodist Episcopal Church let contract to Gross & Swigert Co., Huntsville and Waco, Tex., to erect building to replace structure previously noted damaged by fire; rebuilt by old plans; pressed brick exterior; tin or asbestos shingle roof; edge grain pine or maple ply floors; hot air heat; electric lights; cost about \$45,000; construction begun. Address Gross & Swigert Co., Huntsville. (Lately noted.)

CITY AND COUNTY

Tenn., Chattanooga.—Pavilion, etc.—City let contract to D. F. Brandon, Chattanooga, to erect dancing pavilion 46x108 ft. and carousel building 72x100 ft., in Lincoln Park; wood frame; composition roof; maple and concrete floors, respectively; cost of both buildings, \$8500; C. E. Bearden, Archt., Chattanooga. (Lately noted.)

Tenn., Nashville.—Fire Hall.—City, Wm. Gupton, Mayor, let contracts as follows to erect Waverly-Belmont fire hall: Concrete work, Fisher Concrete Co., \$745; plumbing, J. M. Gallagher, \$778; carpenter work, John Moore, \$2835; brick work, Bush Building Co., \$2950; electric work, Herbrick & Lawrence, \$250; plastering, W. T. Hardison & Co., \$464; painting, F. J. Ehrhart, \$336; glazing, Warren Bros. Co., \$123; cut-stone work, Tanksley & Drumwright Cut Stone Co., \$1675; stone foundation, Clayton Paving Co., \$300; roofing, Phillips-Tolmie Co., \$585; plans by Marr & Hollman, 701 Stahlman Bldg., Nashville, call for colonial residence style; 2 stories and basement; portico, with heavy fluted columns in front and balconies above; upper floor for dormitories and lockers for firemen; shower baths; first story interior walls faced with white enamel brick; exterior walls red matt brick; stone trim; brick composition roof. (Lately noted.)

DWELLINGS

D. C., Washington.—Washington Realty Co. let contract to H. A. Christman to erect 2 frame dwellings at 701x05 Van Buren St.; cost \$3000; Clarence T. Rose, Archt., 311 Corcoran Bldg., Washington.

D. C., Washington.—Michael Helster let contract to R. P. Whitty Co., Union Trust Bldg., Washington, to erect 2-story frame dwelling on R. C. F. Road; cost \$2000; Milburn Helster & Co., Archts., Union Savings Bank Bldg., Washington.

D. C., Washington.—Mrs. A. G. Kay let contract to Meitzler & McKay, 216 Oxford Bldg., Washington, to remodel dwelling at 1906 Twenty-third St. N. W.; cost \$2000.

Fla., Bradentown.—E. E. Bishop has plans by and let contract to T. W. Hullinger & Son, Bradentown, to erect residence, 2 ml. from Bradentown on Palma Sola Road; brick and wood; 80x75 ft.; cost \$14,000; also plans to erect boathouse, barns, etc.; total cost about \$50,000.

Ga., Atlanta.—Ida Richmond, 83 E. North Ave., let contract to Gaul Construction Co., 21 Boulevard Place, Atlanta, to erect bungalow; 5 rooms; frame; composition shingle roof; pine floors; electric lights; cost \$2600; M. F. Morris, Archt., 525 Atlanta National Bank Bldg., Atlanta. Address contractor. (Lately noted.)

Ga., Savannah.—H. D. Stevens, Isle of Hope, let contract to F. McRae, Savannah, to remodel residence.

Tex., San Antonio.—Thomson Electric Co., 615 River Ave., let contract to Ernest Scrivner, 909 Garden St., San Antonio, to erect residence and business building; brick and tile; metal roof; concrete floors; cost \$8000; Clyde J. Williams, Archt., San Antonio. (See Stores.)

Ky., Louisville.—Consolidated Realty Co. let contract to General Construction Co., Louisville, to erect residence at 1706 Windsor Place; 40x40 ft.; 2 stories; brick; tile roof; wood floors; cost \$5500; hot-air heat, \$350; electric lighting, \$300; Heatt Bros., Archts., Louisville. (Lately noted.)

La., Alexandria.—E. Savoy will erect \$2500 residence B. H. Etheridge, Contr., Alexandria.

La., Alexandria.—Schmack Estate let contract to A. J. Touissant to erect brick residence; cost \$2500.

La., Alexandria.—Mrs. F. J. Hartig let contract to B. H. Etheridge, Alexandria, to erect \$2500 residence.

La., Alexandria.—A. R. Danwood let contract to B. H. Etheridge, Alexandria, to erect residence; cost \$5000.

La., New Orleans.—Home Seekers' Home-stead Assn. let contract to F. Hoffman, New Orleans, to erect 1-story frame residence, St. Claude Ave.; cost \$4200.

Miss., Charleston.—J. H. Dognan let contract to Ben Sanders, Charleston, to erect residence; cost \$8000 to \$10,000; R. B. Spencer, Archt., Jackson, Miss.

Okla., Oklahoma City.—E. P. Gallup let contract to Stewart & Wilderson, Oklahoma City to erect frame residence; cost \$2500.

Okla., Oklahoma City.—C. W. Coter let contract to R. D. Cooper to erect frame residence; cost \$2500.

Okla., Oklahoma City.—A. H. Maidt let contract to Self & Martin to erect residence; cost \$4000.

Okla., Oklahoma City.—J. Hicks let contract to Manhattan Construction Co. to erect dwelling; 2 stories; frame; cost \$7000.

Okla., Oklahoma City.—H. Bolen will erect residence; 2 stories; brick veneer; cost \$800; H. P. Smiser, Contr.

Okla., Oklahoma City.—F. Kilpatrick let contract to L. C. Stone to erect residence; frame; cost \$3000.

Okla., Oklahoma City.—H. F. Bradburn let contract to C. E. Frye, Oklahoma City, to erect 3 frame dwellings in 600 block E. 12th St.; cost \$4200, \$3000 and \$3600, respectively.

Okla., Oklahoma City.—T. E. Cullen will erect residence; frame; cost \$5500; C. E. Frye, Contr., Oklahoma City.

Okla., Oklahoma City.—W. T. Brown let contract to C. E. Frye, Oklahoma City, to erect residence; 2 stories; brick; cost \$9500.

Okla., Oklahoma City.—S. M. Armour let contract to J. E. Donnell, Oklahoma City, to erect residence; frame; cost \$3250.

Okla., Oklahoma City.—Zeigler & Cook let contract to B. D. Snyder to erect frame residence; cost \$2500.

Okla., Oklahoma City.—J. E. Bates let contract to O. S. Harris to erect dwelling; frame; cost \$3000.

Okla., Oklahoma City.—J. H. May let contract to Burton & Son to erect 2-story frame residence; cost \$3500.

Okla., Oklahoma City.—J. B. Streeter will erect residence; frame; cost \$3000; O. White, Contr.

Okla., Oklahoma City.—W. E. Smith let contract to C. E. Frye, Oklahoma City, to erect dwelling; 2 stories; frame; cost \$6000.

Okla., Oklahoma City.—V. L. Tarvis let contract to J. E. Donnell, Oklahoma City, to erect \$2500 dwelling; frame.

Tex., Beaumont.—W. A. Miller let contract to T. Gibson to erect bungalow; 4 rooms; hollow tile and stucco; cost \$5000; C. A. Logan, Archt., Beaumont.

Tex., Beaumont.—J. Lederer will erect dwelling; 5 rooms; cost \$2500; R. E. Master-son, Contr.

Tex., Beaumont.—J. S. Coffel let contract to C. A. Stewart to erect residence; 6 rooms; cost \$2900.

Tex., Beaumont.—M. Hobart let contract to W. Renfre to erect two 5-room dwellings, Avenue C and Royal St.; cost \$3400 each.

Tex., Beaumont.—F. C. Weber has plans by C. A. Long and let contract to J. A. Pitts to erect bungalow; 5 rooms; cost \$3000.

Tex., Beaumont.—Miss M. Garland will erect two 5-room dwellings; cost \$3000; B. E. Quinn, Contr.

Tex., Beaumont.—W. H. Brooks let contract to C. W. Prince to erect 5-room bungalow; cost \$3000.

Tex., Dallas.—A. Samuels let contract to A. R. Eckert to erect dwelling; 2 stories; frame; cost \$6500.

Tex., Dallas.—I. T. Williams let contract to A. R. Eckert, Dallas, to erect dwelling; 2 stories; 7 rooms; cost \$4000.

Tex., Dallas.—Y. O. McAdams let contract to Rogers, Jones & O'Rourke, Dallas, to erect addition to residence; cost \$3500.

Tex., Houston.—W. G. Frazer let contract to O. Windt, Houston, to erect three 5-room dwellings on Hamilton St.; cost \$5400.

Tex., Houston.—A. Cockrell let contract to Cottage Construction Co., Houston, to remodel dwelling; cost \$4000.

Tex., Houston.—Oriental Textile Co. will erect ten 3-room dwellings on 23d and Law-

rence Sts.; cost \$3000; E. Wennersten, Contr. (Lately noted.)

Tex., Houston.—J. Bouderer let contract to V. D. Santo to erect residence; 2 stories; cost \$2650. (Lately noted.)

Tex., Houston.—E. F. Woodward let contract to C. W. Raper to erect residence; 2 stories; frame; cost \$9000.

Tex., Houston.—Carter Lumber & Building Co. let contract to J. A. Reynolds, Houston, to erect two 5-room frame dwellings, Park Drive and Ruske Ave.; cost \$2500 each; will also erect 7-room frame residence and garage on McKinney Ave.; cost \$3000.

Tex., Houston.—E. W. Hardwick let contract to S. A. Coulter, 1710 Mason St., Houston, to erect residence; 2 stories; 7 rooms; stucco; cedar shingle roof; oak floors; electric lights; cement sidewalks; cost \$4750; Russell-Brown Co., Archt., Houston. (Lately noted.)

Tex., Houston.—V. D. Smith let contract to T. N. McMillan, Houston, to erect 6-room frame residence and garage; cost \$2630.

Tex., San Antonio.—F. G. Francis let contract to Chas. Royster, Kentucky Ave., San Antonio, to erect residence; 34x40 ft.; frame shingle roof; pine floors; cost \$2500. (Lately noted.)

Va., Hot Springs.—L. C. Alphin let contract to erect dwelling; concrete and stucco; cost \$20,000; M. F. Moore, Archt., Colorado Bldg., Washington, D. C.

GOVERNMENT AND STATE

D. C., Washington.—Hospital.—Bureau of Yards and Docks, Navy Dept., let contract to Skinker & Garrett, 1416 F St., Washington, to erect addition to Walter Reed Hospital. (See Hospitals.)

Fla., Pensacola.—Latrines.—Bureau of Yards and Docks, Navy Dept., Washington, D. C., let contract at \$14,600 to Wise Granite Construction Co., American National Bank Bldg., Richmond, Va., to erect latrines for detention camp.

Fla., Pensacola.—Barracks.—Bureau of Yards and Docks, Navy Dept., Washington, D. C., let contract at \$54,827 to Austin Company, 1313 H St. N. W., Washington, D. C., to erect barracks for 300 men at Naval Air Station. (Lately noted.)

Fla., Tampa.—Barracks.—War Department, Washington, D. C., has plans by and let contract to G. A. Miller, Tampa, to erect barracks to accommodate 160 soldiers guarding Tampa ship-yards; 140x30 ft.; 2 stories; mess hall 112x30 ft.; officers' quarters to have 7 bedrooms, dining-room, assembly-room, etc.; frame; storm sheathing; double floors; cost about \$15,000. (Previously noted.)

Miss., Meridian.—Postoffice.—Treasury Department, Washington, D. C., let contract to Wm. MacDonald Construction Co., 428 Odd Fellows' Bldg., St. Louis, to alter post-office building lately noted; concrete floors; changes to heating and lighting system. (See Machinery Wanted—Plumbing; Marble; Granite; Hardware.)

Va., Fort Lock.—Barracks, etc.—Cantonment Division, War Dept., Washington, D. C., let contract to Wise Granite Construction Co., American National Bank Bldg., Richmond, to erect barracks and buildings for stevedore regiments. (See Va., Norfolk.)

Va., Hampton Roads.—Mechanics' School.—Bureau of Yards and Docks, Navy Dept., Washington, D. C., let contract at \$12,218 to Boyle Robertson Construction Co., 601 Evans Bldg., Washington, D. C., to erect mechanics' school. (Lately noted.)

Va., Norfolk.—Barracks, etc.—Cantonment Division, War Dept., Washington, D. C., let contract to Wise Granite Construction Co., American National Bank Bldg., Richmond, to erect barracks and buildings for stevedore regiments. (See Va., Norfolk.)

Va., Portsmouth.—Barracks, etc.—Cantonment Division, War Dept., Washington, D. C., let contract to Wise Granite Construction Co., American National Bank Bldg., Richmond, to erect barracks and buildings for stevedore regiments. (See Va., Norfolk.)

HOSPITALS, SANITARIUMS, ETC.

D. C., Washington.—Bureau of Yards and Docks, Navy Dept., let contract to Skinker & Garrett, 1416 F St., Washington, to erect addition to Walter Reed Hospital; cost about \$750,000. (Lately noted.)

HOTELS

Fla., Miami.—Mrs. E. W. Mitchell has plans by and let contract to John W. Can-

ter, Miami, to remodel third floor of Frances Hotel for additional rooms; 50x90 ft.; frame; Naposet fireproof roof; standard flooring; cost \$3500; T. W. Mitchell, Mgr. (Lately noted.)

Fla., Fort Lauderdale.—Broward County Hotel Co. let contract to C. O. Byrd, Miami, Fla., to erect hotel on Andrews Ave.; 130x120 ft.; 4 stories; 1st story, concrete; 3 upper stories, Dennison interlocking tile; stucco trim; 4-ply asbestos built-up roof; street floor, concrete, tile and marble; remaining floors, wood; low-pressure steam heat; 1-passenger elevator; cost \$125,000; contract for brick, tile, plaster and stucco work let to John B. Orr, Miami; construction begun; August Geiger, Archt., Townley Bldg., Miami. (Lately noted.)

Mo., St. Louis.—Houser Real Estate Co. has plans by and let contract to Chaplin Construction Co., St. Louis, to remodel 7-story office building for hotel; fireproof construction and roof; concrete floors; steam heat; electric lights. Address F. D. Michael, St. Louis. (Lately noted.)

Tex., Brownwood.—Court Square Hotel Co. is reported to have let contract to Crotty & Co., Dallas, to erect hotel on Empire Furniture Co.'s site.

Tex., Dallas.—R. L. Spann let contract to G. W. Hewitt, Dallas, to erect 2-story addition to Jefferson Hotel; brick and concrete; Johns-Manville roofing; first floor, tile; second, hardwood on concrete; heating and lighting from hotel; cement sidewalks; cost \$17,000; Lang & Wittich, Archts., Dallas. Address Jefferson Hotel. (Lately noted.)

MISCELLANEOUS

Ark., Little Rock.—Bandstand.—War Camp Community Service let contract to erect \$2500 bandstand and dance hall in city park; J. A. Ginochio, Chrmn. Building Committee.

La., New Orleans.—Clubhouse.—Audubon Golf Club let contract to J. A. Rodick, New Orleans, to erect addition to clubhouse; cost \$5000.

SCHOOLS

Ala., Montgomery.—Evangelical Lutherans of Ohio let contract to Charles Mathews, Montgomery, to erect school at Cleveland Ave. and Mill St.; 4 rooms; frame; cost \$4000; Frederick Ausfeld, Archt., Montgomery.

Ala., Sheffield.—Building Committee, Geo. E. Saywell and others, let contract to P. E. Bostick, First National Bank Bldg., Birmingham, to erect high school; 114x72 ft.; 3 stories; ordinary construction; brick and wood; tar and gravel roof; wood floors; steam heat; electric lights; cost, including heating, plumbing and wiring, \$50,000; plans by and construction under supervision of King & Burnham, Birmingham. (Previously noted.)

Ark., Wilmar.—Wilmar Special School District let contract to R. W. Lane, Dermott, Ark., to erect school; 85x93 ft.; wood; metal roof; pine floors; heating and lighting not decided; cost \$10,000; Jas. H. Bliss, Archt., Southern Trust Bldg., Little Rock; construction begins about June 1. Address F. E. Seymour, Secy., Wilmar. (Lately noted.)

Md., Oakland.—Board of Education, R. E. Sliger, Pres., let contract to E. L. Winchell & Co., Mountain Lake Park, Md., to erect 3-story addition and alter old courthouse for high school; addition 31x80 ft.; brick; composition roof; frame floors; cement sidewalk; cost \$32,000; steam heat, \$500; George F. Sansbury, Archt., Cumberland, Md. (Lately noted.)

Miss., Clarksburg.—City School Board let contract to W. J. McGee, Jackson, Miss., to erect school building; brick; vacuum heat; electric lights; also let contract to Fisher Heating Co., Memphis, for heating; total cost \$95,000; plumbing and wiring contracts not let; R. H. Hunt, Archt., Chattanooga, Tenn. (Lately noted.)

Miss., Columbia.—Mississippi Industrial & Training School let contract to Dabbs & Wetmore, Meridian, for general contract, plumbing and heating of proposed buildings; also let contract to Troy Laundry Co., Chicago, for laundry equipment and to Albert Pick & Co., Chicago, for furniture and fixtures; Xavier A. Kramer, Archt., Magnolia, Miss. (Lately noted.)

S. C., Cedar Springs.—South Carolina School for the Deaf and Blind let contract to C. M. Guest, Anderson, S. C., on cost plus basis, to remodel interior central portion of administration building and erect laundry and boiler-house building; also let contract at \$10,717.97 to L. L. Barr, Greenville, S. C., for central heating plant; plans

by Edwards & Sayward, Archts., Atlanta, call for ordinary construction; slate roof; wood, cement and tile floors; vapor vacuum high-pressure heating system; electric lights; cost about \$34,000; completion by Sept. 15. Address contractors. (Previously noted.)

S. C., Saluda.—Saluda School Dist., T. B. Mathews, Secy., let contract to Joe W. Stout & Co., Sanford, N. C., to erect 11-room school; 52x128 ft.; 3 stories; ordinary construction; tin roof; wood floors; city lighting; cost \$25,000; Wilson & Sompayrac, Archts., Columbia, S. C. construction begins about June 1. (Lately noted.)

Tex., Beaumont.—City, J. G. Sutton, Secy., let contract at \$23,490 to Herman Weber to erect addition to Ogden school; to Thos. Gibson at \$37,965 and at \$30,963 to erect Fletcher and Refinery schools, respectively; brick, tile and concrete; composition roof; concrete and wood floors; steam heat and stoves; Sanguinet, Staats & Gottlieb, Archts., Fort Worth and Houston. (Previously noted.)

Tex., Fort Worth.—School Board let contract to J. C. Buchanan, Fort Worth, to erect North Side High School; plans by Sanguinet & Staats, Fort Worth, call for 15 classrooms, auditorium, chemical and physical laboratories, manual training and domestic science rooms, library and rest-rooms for teachers; cost \$159,621; contract to W. H. King, Dallas, to erect 6-room addition to Carroll Peak school and 6-room addition to Peter Smith school; Van Horn & Martel, Fort Worth, to erect 6-room addition to Van Zant school; total cost \$238,833. (Previously noted in part.)

Tex., Meridian.—Building Committee, H. C. Odle, Chrmn., let contract to C. S. Oats, Dublin, Tex., to erect college dormitory; stone, brick or concrete; cost \$12,750. (Lately noted.)

Tex., Vernon.—School Board, R. B. Sherrill, Secy., let contract at \$15,290 to Chas. M. Balukowski, Wichita Falls, Tex., to erect high school; 6 rooms and auditorium; steam heat; electric lights; Madorie & Field, Archts., K. & K. Bldg., Wichita Falls. (Lately noted.)

Va., Hampton Roads.—Bureau of Yards and Docks, Navy Dept., Washington, D. C., let contract at \$12,218 to Boyle Robertson Construction Co., Washington, D. C., to erect mechanics' school. (See Government and State.)

STORES

Ark., De Witt.—D. H. and R. W. Dudley let contract to erect 2-story brick business building; cost \$15,000; John P. Almand, Archt., Little Rock.

La., Alexandria.—J. B. Thigpen let contract to G. C. Wilson to erect 2-story brick business building; cost \$9000.

Md., Baltimore.—The Hub let contract to Chas. L. Stockhausen, Gay and Water Sts., Baltimore, to improve building at Baltimore and Charles Sts.; Smith & May, Archts., 1133 Calvert Bldg., Baltimore.

Md., Taylor Island.—R. E. Harrington let contract to T. H. Parrish, Cornersville, Md., to erect store building; 85x40 ft.; frame; slag roof; wood floors; electric lights; cost \$1000; hot-air heat, \$200. (Previously noted.)

Miss., Roxie.—W. C. Seale has plans by and let contract to H. B. Nelson, Roxie, to erect store building to replace burned structure; 30x60 ft.; brick; concrete floors; roofing not decided. (Lately noted burned.)

Tex., Dallas.—H. H. Hartman let contract to Childs & Lasele Construction Co., Dallas, to repair brick business building; cost \$4500. (Lately noted.)

Tex., Dallas.—H. C. Coke let contract to Watson Company, Dallas, to repair brick business building; cost \$12,000. (Lately noted.)

Tex., Dallas.—J. K. Hexter, Agent, let contract to W. H. King to remodel 3-story brick business building; cost \$5100.

Tex., Dallas.—G. H. Schoellkopf let contract to G. G. Johnson, Jr., Dallas, to erect 2-story brick business building; cost \$15,000. (Previously noted.)

Tex., San Antonio.—Thomson Electric Co., 615 River Ave., let contract to Ernest Scrivener, 909 Garden St., San Antonio, to erect business and residence building; brick and tile; metal roof; concrete floors; cost \$8000; Clyde J. Williams, Archt., San Antonio. (Lately noted.)

Tex., San Antonio.—San Antonio Drug Co. let contract to Wright & Sanders, San Antonio, on percentage basis, to erect store; 110x140 ft.; 7 stories and basement; reinforced concrete; roofing and floor construction not decided; Adams & Adams, Archts.,

San Antonio; construction begun. (Previously noted.)

Tex., Wichita Falls.—Mrs. Alex. Kahn let contract to remodel and erect additional story to building at 7th St. and Indiana Ave. for business purposes; to be leased by Saul Lebonson; install steel and plate-glass front, display windows, etc.

Va., Berkeley, P. O. at Norfolk.—W. J. Luke let contract to Brown & Keeter, Berkeley, to erect hardware store at Wilson Road and Hodges Ave.; 30x70 ft.; 2 stories; brick; metal roof; concrete floors; electric lighting from city plant; stoves; cost \$3200; construction begun; completion about July 1.

THEATERS

Tex., Dallas.—D. E. Waggoner and others let contract to Childs & Laselle Construction Co., Dallas, to erect Majestic Theater; W. H. Keyser, Archt. (Previously noted.)

WAREHOUSES

Ga., Nicholls.—Planters' Warehouse Co. has plans by and let contract to J. L. Bouchillon, N'cholls, to erect cotton and

tobacco warehouse; 100x150 ft.; brick; composition roof; wood floors; oil lighting. (Lately noted damaged by fire.)

Ky., Madisonville.—J. L. Burchfield let contract to erect loose leaf tobacco warehouse; 250x115 ft.; steel to cost \$7850 will be used; portion purchased; total cost \$35,000.

Md., Baltimore.—Bartlett-Hayward Co., Scott and McHenry Sts., let contract to Morrow Bros., 1201 Fidelity Bldg., Baltimore, to erect two 1-story powder magazines at Columbia Ave. and Putnam Sts.; 14x25 ft.; Parker, Thomas & Rice, Archts., 1109-11 Union Trust Bldg., Baltimore.

S. C., Loris.—Farmers' Tobacco & Storage Warehouse Co. let contract to A. R. Lane, Loris, to erect warehouse; 80x200 ft.; brick; metal roof; cement floors; cost \$10,000; lighting, \$500. (Lately noted.)

Tex., Fort Worth.—Louis Cohen let to Mr. Hart, Fort Worth, to erect warehouse and office building at Pacific and Oak Sts.; 2 stories; 40x70 ft.; brick; gravel roof; wood and concrete floors; hand elevator; cost \$7000; W. G. Clarkson, Archt., Fort Worth. (See Bank and Office.)

MACHINERY, PROPOSALS AND SUPPLIES WANTED

Manufacturers and others in need of machinery or supplies of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery or supplies needed we will make their wants known free of cost, and in this way secure the attention of manufacturers and dealers throughout the country. The Manufacturers Record has received during the week the following particulars as to machinery and supplies wanted.

"WANTS"

Belting.—W. A. Carver, Rougemont, N. C.—Prices on 72 ft. belting 11 or 12 in. wide, and 4, 5 or 6-ply thick; also 60 ft. belting 10 to 12 in. wide and 4, 5 or 6-ply.

Boiler.—F. E. Patton, Bushnell Bldg., Springfield, Ohio.—Prices on 30 H. P. boiler, mounted on wheels.

Boiler.—See Engine and Boiler.—J. M. Howard.

Boilers (Water Tube).—Lock Box 41, Phillipsburg, N. J.—Prices on 4 high-pressure water-tube boilers; second-hand. Give details.

Boiler, etc.—Aliceville Iron Works, Aliceville, Ala.—12 to 16 H. P. steam boiler and engine; second-hand; good condition.

Boilers (Water Tube).—Contractors' Machinery Co., 1010 Kansas Ave., Kansas City, Kan.—Prices on two 500 H. P., type "S" Sterling water-tube boilers; give dimensions, inspection report, age, etc.

Brick.—See Building Material.—F. S. Howell.

Brick.—Coca-Cola Bottling Co., Pine Bluff, Ark.—Prices on brick, etc. (See Building Materials.)

Bridge Construction.—Santa Rosa County Commrs., Milton, Fla.—To let contract June 11 to erect 20x200-ft. steel and concrete bridge; J. A. Mortland, Engr., Tallahassee, Fla.; plans and specifications at office of State Road Dept., Tallahassee.

Bridge Construction (Steel).—See Road and Bridge Construction.—Conway County Commrs., Road Improvement Dist. No. 1.

Bridge Construction.—Preston County Court, Kingwood, W. Va.—Bids until June 3 to repair bridge over Cheat River at Caddell, W. Va.; cleaning and painting iron work of bridge below wheel guard level; supplying additional stringers and ties; laying plank floor of white or chestnut oak or creosoted wood blocks; specifications on file with H. E. Wilhelm, Dist. Engr., Herring Bldg., Kingwood.

Building Material.—F. S. Howell, Secy. Building Committee, Ozark, Ala.—Prices on brick, cement, roofing and steam heating for \$40,000 school building.

Building Materials.—Coca-Cola Bottling Co., Pine Bluff, Ark.—Prices on brick, lime, cement, prepared roofing for flat surface, large store doors, transoms, window frames, etc.

Building Materials.—Rev. C. C. Harper, 2905 Thomas Ave., Dallas, Tex.—Prices on building materials, wall board, doors, partitions, etc., for \$10,000 institutional church.

Canning Machinery.—Columbus Bierce, Memphis, Tenn.—Complete outfit for canning vegetables, fruit, etc.

Cars.—L. G. Everist, Inc., Sioux City, Iowa.—20 cars. (See Rails, etc.)

Carpet-cleaning Machinery.—Najib Hekimian (Oriental Floor Coverings), 1512 H St. N. W., Washington, D. C.—Addresses of manufacturers installing carpet-cleaning machinery.

Cement.—See Building Material.—F. S. Howell.

Chain (Coil).—A. B. Clark Co., 225 Fifth Ave., New York.—Prices on coil chain. (See Rope.)

Cold-storage Plants.—Najib Hekimian (Oriental Floor Coverings), 1512 H St. N. W., Washington, D. C.—Address of manufacturers installing cold-storage plants.

Concrete Work.—City of Columbia, S. C., Fred. C. Wise, Engr.-Supt.—Bids until June 11 to construct concrete foundations for pumps and walls of buildings, valve pits and floors at water-works plant; 43 cu. yds. pump foundation, 90 cu. yds. wells, 250 sq. yds. floor, excavation and filling; plans and specifications on file at City Hall.

Contractors' Equipment.—Roy C. Whayne Supply Co., 318 W. Main St., Louisville, Ky.—Contractors' equipment, such as hoisting engines, derricks, clamshell buckets, etc.; available for immediate shipment from points near Louisville.

Contractors' Equipment.—See Rope.—A. B. Clark Co.

Dikes, etc.—United States Engr. Office, Bankers' Trust Bldg., Little Rock, Ark.—Bids until June 20 to construct mattresses and dikes.

Drainage System.—Directors of Drainage Dist. No. 6 of Gibson, Weakley and Carroll counties, W. W. Powers, Chrmn., Trenton, Tenn.—Bids until June 6 to construct drainage canal 25 mi. long; excavation 2,065,000 cu. yds.

Dredging Machinery.—Abston, Crump & Wynne, 8 S. Front St., Memphis, Tenn.—Machinery for digging 10 or 12 mi. open ditch, average depth 5 ft., proper slope; alluvial soil, mainly sandy loam; work will include cleaning ditches and deepening natural drains; location, East Carroll Parish, La.

Drums (Carbide).—Industrial Laboratories, Fort Smith, Ark.—Carload shipments of empty used metal carbide drums.

Drums (Hoisting).—Guyan Machine Works, Logan, W. Va.—Prices on hoist drums, friction driven.

Electrical Machinery.—Joaquin Laurin, Elec. Engr., 103 Real St., Ferrol, Spain.—To represent American manufacturers of electrical motors for offices, manufacturing establishments and mining; factory equipment.

Engines (Hoisting).—Lock Box 41, Phillipsburg, N. J.—Prices on 2 double-drum

hoisting engines with boilers; second-hand; give details.

Engine (Hoisting).—Roy C. Whayne Supply Co., 318 W. Main St., Louisville, Ky.—2 and 3-drum hoisting engine, with and without boilers.

Engines (Corliss; Crude Oil).—Ripley Oil Mills, Ripley, Tenn.—Prices on second-hand 20x42-in. left-hand rope-drive Corliss engine; good repair; not re-bored; give shop number, how long used, and kind of (latest) service; also want prices on good second-hand 75 H. P. crude-oil engine.

Engine and Boiler.—Aliceville Iron Works, Aliceville, Ala.—12 to 16 H. P. steam engine and boiler; second-hand; good condition.

Engine and Boiler.—J. M. Howard, New Richmond, O.—Hoisting engine, 8x12 or larger, double cylinder, triple or double drum, with boiler.

Engineering Literature.—M. V. Cheesman, 603 Citizens' Bank Bldg., Tampa, Fla.—Catalogs and other literature of interest for municipal engineering.

Flour Mill Machinery.—The Hammond Co., R. L. Hammond, Secy.-Mgr., Laurinburg, N. C.—Prices on flour mill machinery, 200 barrels daily capacity.

Governor (Steam Engine).—W. A. Carver, Rougemont, N. C.—Prices on governor for steam engine, 2½-in. steam pipe connections.

Granite.—Wm. MacDonald Construction Co., 428 Odd Fellows' Bldg., St. Louis, Mo. Prices on granite for use in altering post-office building at Meridian, Miss.

Hardware.—Wm. MacDonald Construction Co., 428 Odd Fellows' Bldg., St. Louis, Mo. Prices on hardware for use in altering post-office building at Meridian, Miss.

Heating.—See Building Material.—F. S. Howell.

Heating Equipment.—Rev. C. C. Harper, 2905 Thomas Ave., Dallas, Tex.—Prices on heating apparatus for \$10,000 institutional church building.

Heating Plant.—Geo. C. Royall, Chrmn. School Board, Goldsboro, N. C.—Steam heating system for two \$20,000 school buildings.

Hoisting Machinery.—See Engine and Boiler.—J. M. Howard.

Lampblack Machinery.—The Lampblack Mfg. Co., Box 239, Tulsa, Okla.—Equipment to manufacture lampblack from natural gas.

Locomotive.—Otey H. Harris, 512 Lyric Bldg., Birmingham, Ala.—20-ton Jeffrey locomotive.

Locomotives.—L. G. Everist, Inc., Sioux City, Iowa.—2 Koppel locomotives; 24-in. gauge.

Manufacturing Equipments.—Joaquin Laurin, Elec. Engr., 103 Real St., Ferrol, Spain.—To represent American manufacturers of machinery for factories.

Marble Work.—Wm. MacDonald Construction Co., 428 Odd Fellows' Bldg., St. Louis, Mo.—Prices on marble work in connection with postoffice alterations at Meridian, Miss.

Mining Equipment.—Marion Coal & Lumber Co., A. N. Walker, Pres., 814 James Bldg., Chattanooga, Tenn.—Mining equipment for coal; specifications not determined.

Motors, Generator Sets, etc.—Panama Canal, A. L. Flint, Gen. Purchasing Officer, Washington, D. C.—Bids until June 14 to furnish motors, generator sets, capstans, radiators, meat chopper, motor-driven pumps, die blanks, foundry nails, shovels, bronze, firebrick, silica sand and wash, coal tar, coal-tar pitch, horse-hair, motor truck and bicycle tires, leather, canvas and leather belting, manila rope, uniform and denim cloth, toweling, rubber erasers, paper, and cypress lumber; blanks, etc., relating to circular (No. 1219) obtainable at this office or offices Asst. Purchasing Agents, 24 State St., New York; 606 Common St., New Orleans, and Fort Mason, San Francisco; also from United States Engr. offices in principal cities throughout United States.

Mining Machinery.—Joaquin Laurin, Elec. Engr., 103 Real St., Ferrol, Spain.—To represent American manufacturers of mining machinery.

Moving-Picture Equipment.—Rev. C. C. Harper, 2905 Thomas Ave., Dallas, Tex.—Prices on moving-picture equipment for \$10,000 institutional church.

Nails (Wire).—Charles R. Fife Co., 1411 Central National Bank Bldg., St. Louis, Mo. Large quantity second-hand or rusted wire nails.

Packing Machines (Wheat Bran).—International Sugar Feed Co., Memphis, Tenn.—

Addresses of manufacturers of wheat-bran packers.

Paving.—City of Drumright, Okla., W. E. Nicodemus, Mayor.—To let contract June 3 on 50,000 yds. brick pavement; information with Mayor and with Ray Flood, City Engr.

Paving.—City of Lake Alfred, Fla., J. F. Jester, Clerk.—Bids until May 31 on 15,000 sq. yds. asphalt concrete paving, 25,000 sq. yds. clay foundation and 48,000 cu. yds. earth excavation, with concrete curb and gutters; J. W. Turner, Engr., Lakeland, Fla.

Paving, etc.—R. E. Meade, City Engr., Florence, Ala.—Bids until June 4 to pave with bitulithic, construct sidewalks, curb and grade Court and Water Sts.; blank forms from City Engr.

Piling (Lackawanna).—F. E. Patton, Bushnell Bldg., Springfield, Ohio.—Prices on 500 to 600 pieces 14-in. Lackawanna piling, 30 ft. long.

Piling (Steel).—Roy C. Whayne Supply Co., 318 W. Main St., Louisville, Ky.—100 pieces 14-in. arch web Lackawanna steel sheet piling; 35 to 45 ft. long or equivalent.

Plates.—Guyan Machine Works, Logan, W. Va.—Prices on plates, ½-in. to 1-in. thick, any condition. (See Steel.)

Plumbing.—Wm. MacDonald Construction Co., 428 Odd Fellows' Bldg., St. Louis, Mo. Prices on plumbing work in postoffice alterations at Meridian, Miss.

Pump.—Marion Coal & Lumber Co., A. N. Walker, Pres., 814 James Bldg., Chattanooga, Tenn.—Small pump for water supply.

Rails.—Marion Coal & Lumber Co., A. N. Walker, Pres., 814 James Bldg., Chattanooga, Tenn.—6 to 10 mi. 60-lb. relay rails within next 60 days.

Rails, etc.—L. G. Everist, Inc., Sioux City, Iowa.—5 mi. Koppel track; 2 Koppel locomotives; 20 cars; all 2-in. gauge.

Rails.—Carolina Traction Co., Jas. S. White, Secy., Rock Hill, S. C.—Prices on 60-lb. relaying rails for 3 mi. single track; with or without angle bars.

Rails.—A. B. Clark Co., 225 Fifth Ave., New York.—Prices on relay rails. (See Rope.)

Road Construction.—Highway Commrs. of Supprs. Dist. No. 3 of Yazoo County, T. H. Craig, Chrmn., Yazoo City, Miss.—Bids until June 5 to construct 28 mi. road as follows: Benton Rd., 7.88 mi.; Anding Rd., 17.71 mi.; River Rd., 9.02 mi.; information from G. R. Thomas, Engr., Yazoo City.

Road Construction.—Coosa County Commrs., Rockford, Ala.—Bids until June 24 to construct 5.8 mi. Turnpike Rd., being part of State Trunk Rd. No. 10, between Speed and Rockford, Ala.; 5 acres clearing and grubbing; 36,493 cu. yds. excavation; 3500 cu. yds. solid rock excavation; 139 cu. yds. concrete; 1900 ft. vitrified pipe; 22,320 ft. lumber; 1150 ft. piling; 16,104 cu. yds. top soil; plans and specifications on file with State Highway Dept., Montgomery, and with Judge of Probate, Courthouse, Rockford; additional information from W. S. Keller, State Highway Engr., Montgomery.

Road Repairs.—Chas. E. Bolling, City Engr., Richmond, Va.—Bids until May 31 to improve Government road from Gilles Creek to National Cemetery; repairs to consist of filling holes with asphaltic mixture and further application of asphaltic paint or seal coat and chips; proposal forms on application.

Road Construction.—Cass County Court, Harrisonville, Mo.—Bids until June 3 to improve 12 mi. State road from Harrisonville to Pleasant Hill; Project No. S 182; grading, surfacing with water-bound macadam, oiling earth shoulders and constructing culverts; macadam surfacing to be 9 ft. wide, except for ¾ mi., which is to be 16 ft. wide; plans and specifications on file with Ben D. Prater, Engr., Harrisonville, and with State Highway Dept., Jefferson City; plans and specifications obtainable from Engr.

Road Construction.—State Roads Comsn., Frank H. Zouck, Chrmn., 601 Garrett Bldg., Baltimore, Md.—Bids until May 29 to construct Baltimore and Washington Blvd. in Howard County; 9000 ft. 20-ft. concrete roadway, from Guilford Cross Roads, about Station 166, southerly; 2000 ft. 20-ft. concrete roadway, from Waterloo northerly; 5000 ft. 20-ft. concrete roadway, from Wesley Grove southerly; 73,800 ft. 3-ft. concrete shoulders, from Patuxent River at Laurel to beginning of 900-ft. concrete section; from Guilford Cross Roads to Waterloo; from 2000-ft. section of concrete road

to 5000-ft. section at Wesley Grove; from Wesley Grove to Elkridge Church; State Roads Com'n. to furnish all labor and material; specifications and plans furnished by Com'n.

Road Construction.—Pasco County Commissioners, Dade City, Fla.—Bids until June 3 to surface 7500 lin. ft. roadway; 12 ft. wide; plans, specifications, etc., on file with Circuit Court Clerk.

Road Construction.—Muskogee County Commrs., Muskogee, Okla.—Bids to construct gravel road on West Okmulgee Ave. Road, from west city limits 4½ mi.; shaping and preparing sub-grade; 11,000 cu. yds. gravel; clay binder; bids opened May 27; plans and specifications on file with Lewis F. Kipp, County Clerk, and T. P. Clouts, County Engr.

Road and Bridge Construction.—Conway County Commissioners, Road Improvement Dist. No. 1, C. E. Cruce, Secy., Morrilton, Ark.—Bids at office of State Highway Com'n., State Capitol, Little Rock, Ark., until June 20 to construct 3½ mi. graded road; 150,000 cu. yds. grading, 250 cu. yds. plain and 500 cu. yds. reinforced concrete; 200 lin. ft. steel bridge, 3000 lin. ft. pipe culvert; plans and specifications on file with County Clerk, Morrilton; State Highway Com'n., State Capitol, Little Rock, and of Dist. Engr., Parks Engineering Co., Pine Bluff, Ark.

Roofing.—See Building Material.—F. S. Howell.

Roofing (Prepared).—See Building Materials.—Coca-Cola Bottling Co.

Rope (Steel; Fiber), Chain, etc.—A. B. Clark Co., 225 Fifth Ave., New York.—Prices on steel rope and fiber rope; coil chain; relay rails; heavy equipment.

Rules (Printers; Copper or Brass).—Matrix Ruled Form and Tabular Co., Touraine Bldg., Fort Worth, Tex.—Address of manufacturers, view to placing order for making printers' rules of copper or brass, 1-ft. lengths; will furnish specifications.

Safe.—Calera National Bank, B. A. McKinney and W. L. Mitchell, Calera, Okla.—Prices on safe for bank.

Sawmills.—Marion Coal & Lumber Co., A. N. Walker, Prest., 814 James Bldg., Chattanooga, Tenn.—Portable sawmills for 20,000-acre timber development.

Seating.—Rev. C. C. Harper, 2905 Thomas Ave., Dallas, Tex.—Prices on seats for \$10,000 institutional church.

Sewer Construction.—City Commrs., Allen J. Roulhac, Chrmn., Sheffield, Ala.—Bids until June 18 to construct sanitary sewers; plans, specifications, etc., on file office of R. A. Chapman, City Engr.

Sewer Construction.—See Water-works and Sewer.—Board Public Works, D. M. Garrett, Chrmn., Fountain Inn, S. C.

Sewer Construction.—Board of Public Service, Room 208, New City Hall, St. Louis, Mo.—Bids until June 11 to construct Bulwer Ave. joint district sewer; plans, specifications, etc., from Prest. Board of Public Service.

Shovel (Steam).—J. M. Howard, New Richmond, O.—Traction steam shovel; 2½ yd. dipper.

Soap (Liquid).—A. K. Robins & Co., 116 Market Place, Baltimore, Md.—Addresses of manufacturers of liquid soap.

Sprinkler System.—Nutro Rice Mill, Gueydan, La.—Prices on sprinkler system.

Steel Building.—Pennsylvania Equipment Co., 1420 Chestnut St., Philadelphia, Pa.—Prices on second-hand steel building, about 114 ft. long, 44 ft. span, 38 ft. high.

Steel Sheeting.—Thos. H. Brockman, 906 Hennen Bldg., New Orleans, La.—Prices on U. S. and Lackawanna steel sheeting; lengths 20 to 40 or 50 ft.

Steel (Cold-rolled Shafting and Plates).—Guyan Machine Works, Logan, W. Va.—Prices on cold-rolled shafting or round steel, 3 3-16-in. to 4 7-16-in., in any condition; also plates ½-in. to 1-in. thick, any condition.

Tank.—Marion Coal & Lumber Co., A. N. Walker, Prest., 814 James Bldg., Chattanooga, Tenn.—20,000 to 30,000-gal. cedar tank.

Tanks (Steel).—A. E. Turner & Co., Pensacola, Fla.—Prices on steel tanks, 5000 to 100,000 gals. capacity.

Tanks.—Lock Box 41, Phillipsburg, N. J.—Prices on 8 large round closed tanks; various sizes; second-hand; give details.

Tanks (Pressure; Gravity).—Nutro Rice Mill, Gueydan, La.—Prices on 50,000-gal. gravity tank and two 9000-gal. pressure tanks.

Turbo Unit.—John G. Duncan Co., 308 W. Jackson Ave., Knoxville, Tenn.—Dealers' prices on 100 K. W. 3-phase, 60-cycle, 2300-volt, 125 lbs. steam pressure horizontal turbo unit 3-stage condensing steam turbine; second-hand and new.

Telephone Equipment.—Pleasant Valley Telephone Co., Jonesboro, Tenn.—Prices on wire, brackets, pins, insulators.

Telephone Switchboard.—Deering Telephone Co., A. B. Johnson, Prest., Deering, Ky.—Prices on small switchboard.

Tower and Tank.—A. E. Turner & Co., Pensacola, Fla.—Prices on second-hand steel water tower and tank, 50,000 to 100,000 gals. capacity; also all classes steel tanks, capacity 5000 to 100,000 gals.

Tractors and Trucks.—Marion Coal & Lumber Co., A. N. Walker, Prest., 814 James Bldg., Chattanooga, Tenn.—Tractors and heavy trucks for hauling timber.

Tubes (Boiler).—Lock Box 41, Phillipsburg, N. J.—Prices on 200 boiler tubes, 18 ft. long, 4 in. diam.; second-hand; give details.

Vacuum Cleaner.—Geo. C. Royall, Chrmn. School Board, Goldsboro, N. C.—Vacuum cleaner for two \$20,000 school buildings.

Wall Board.—See Building Materials.—Rev. C. C. Harper.

Water-works Supplies.—Board of Purchase, E. R. Conant, Chief Engr., Purchasing Officer, Savannah, Ga.—Bids until June 1 to furnish following: 6 hydrants, 2½-in. nozzles, with 6-in. connections, Savannah thread; 12 4-in. hydrants, 2½-in. nozzles, 4-in. connections, Savannah thread; 4½-in. steamer nozzle, Savannah thread; 5000 ft. 4-in. cast-iron pipe; ten 4-in. plugs; twelve 4-in. tees; six 4-in. valves; six 6 to 4-in. reducers; 3000 ft. 1-in. black pipe; 600 ft. 2-in. black pipe; 100 1-in. tees; twenty 2-in. tees.

Water-works and Sewers.—Board Public Works, D. M. Garrett, Chrmn., Fountain Inn, S. C.—Bids until June 6 to furnish material and construct water and sanitary sewer systems; \$75,000 bonds; plans and specifications obtainable from F. W. Wellborn, City Clerk; J. N. Ambler, Const. Engr., Winston-Salem, N. C.

Well-drilling Equipment.—Garber Central Oil & Gas Co., Butler, Okla.—Prices on rig and machinery.

Wharf Construction.—Board of Purchase, Savannah, Ga.—Bids until May 29 to construct wharf in upper Savannah harbor, 2 mi. from Savannah; specifications and information from E. R. Conant, Ch. Engr. and Purchasing Officer.

development expenses, and all taxes, \$80,225,936.91; net manufacturing profit, \$15,509,468.84; gross income from all sources, \$16,834,733.26; net income available for dividends and other purposes after deductions for interest on bonds, notes, debentures, etc., \$15,405,680.89. The gross earnings (sales billed) include shipments (since June 15, 1917) from the machine works, formerly Westinghouse Machine Co., and \$4,536,000 for munitions. The volume of sales for regular products of the company was, it is further stated, greatly in excess of any previous year. On April 1, 1918, the value of unfilled orders on hand was \$147,857,589, of which \$110,185,907 was for regular products of the company. It is also stated that no facilities heretofore employed on regular products are engaged on munition work. The total assets of the company are \$164,714,378.24.

American Military Roads.

"Military roads" are ordinarily supposed to mean roads like those of France, which Napoleon and other French strategists built a century ago as means of defensive mobilization of troops and supplies. In that old and narrow sense of the phrase, we have no military roads, certainly none whose location was governed by military consideration with a view to defense against a landing of hostile troops on our shores.

But warfare has changed, and many of our American highways have become military roads in the strictest sense. The most expert judgment on this point is rendered by General Goethals of Panama Canal fame. Prior to our entrance into the war he was acting as State Engineer of New Jersey, from which position he resigned to become Army Quartermaster-General, with direction of transportation. Before leaving New Jersey he submitted a remarkable report to the State Highway Commission, recommending that it concentrate all its available funds this year on New Jersey's military roads. He listed 14 such routes, which, if properly and uniformly developed and made acceptable for heavy army and civil motor-truck traffic, would have great military value in facilitating truck transportation on a large scale, and relieving the railroad congestion in hauling supplies to the camps, shipping bases and quartermasters' depots.

All his recommendations were promptly accepted, and the first year's levy of a direct tax, which, it is estimated, will total \$15,000,000 in five years, will be spent in strengthening the weak links in the roads which he singles out as of pressing military importance.

Four of the routes connect industrial regions with New York harbor, while other routes are designed at the same time to relieve pressure on New York by facilitating use of other hitherto neglected shipping points. The Quartermasters' depots in Philadelphia, the great shipping plants near Newark, and the war manufacturing centers that are dotted all over the northern end of the State are taken into consideration. Better roads are also called for to the forts at Sandy Hook, the naval station at Cape May and the National Army Cantonments at Camp Dix and Camp Merritt. He pointed out that the only two approaches to the Hudson River were already overburdened with traffic, and suggested regarding of the Passaic Highway so that the steepest grade will be 7 per cent. instead of the present 16 per cent.

Altogether the report is a masterpiece by a competent army officer who fully comprehended modern industrial and economic strategy, the great new feature of this war, which makes it a contest of nations and industries as well as of armies. While no other State has made so comprehensive and expert a survey of the military feature of their road systems, there is evidence that other jurisdictions are alive to the situation and doing their loyal bit on a generous scale. The Goodrich touring bureau estimates that America will spend \$263,066,610 on roads in 1918.

According to these reports, Oregon will spend five times as much as last year. It goes for trunk lines into large timber tracts, from which must come the timber for aeroplanes and wooden ships. Arkansas has raised its appropriation from \$4,000,000 to \$12,000,000. Texas and Oklahoma are making high expenditures, the effect of which will be to facilitate activities in great oil and farming regions. Iowa spent \$15,000,000 last year, and will do it again, extending or improving 6000 miles of highway. Wisconsin is developing a trunk system of roads tapping every town. In the Northeastern States a new feature of importance is the methodical use of snowplows to keep the main industrial routes passable the year round for motor trucks. New York has just

appropriated \$1,000,000 specifically for improving the route from Buffalo to New York city, for inadequate maintenance and lack of snowplow work had impeded army motor transports from the West.

On the other hand, the importance of the subject has not been uniformly appreciated everywhere, and there are numerous sections, particularly in the industrial regions, where the National Government is being seriously embarrassed by inability to do heavy motor-trucking as a means of getting past railroad congestion. The great movement of army trucks for foreign service on their own wheels from Detroit to the seaboard, for example, proved impracticable, except by jumping in and making wholesale repairs and improvements at defective points on the route.

One impassable mile, one neglectful community along the road, is enough to keep a great artery out of use for our military and industrial mobilization. Every State and county ought to survey its situation from this angle, and do its bit. Actual motor-truck traffic is no criterion of a road's possible usefulness. The stream of trucks may be going a longer route at great cost and delay because a shorter route is in disrepair. Or goods may be going by railroad that could easily be carried on the highways if some backward township were not saving money and suspending road work "on account of the war!" Many a community is buying its quota of Liberty Bonds and at the same time ignorantly embarrassing valuable lines of communication, as effectively as if it had allowed the Kaiser's aeroplanes to demolish the roadways with bombs.

The Goethals report (which can be obtained from the State Highway Commission at Trenton) contains enough explanation of various reasons for identifying certain roads as of military importance to furnish a fairly satisfactory guide to road authorities anywhere. Among the questions which the road commissioners of any jurisdiction should consider are:

- 1—Service to army camps.
- 2—Service to war plants and to open up sources of raw material, such as lumber.
- 3—Service between cities where the local road is on a route that might be more freely used.
- 4—Alternative routes to relieve overburdened thoroughfares.
- 5—Reduction of grades that now compel lightening of loads.
- 6—Relief to congested railroads.
- 7—The suitability of the roadbed for heavy motor-truck traffic.

How to make a road suitable for heavy motor-truck traffic is vital at the present moment. Many miles of New Jersey highways have been built of plain macadam, and although they were not designed to carry modern truck travel, much has been accomplished in carrying them through by tar-laying or otherwise protecting the surface from the thundering motor truck and its ponderous loads.

Much more permanent work has been done using the old macadam as a base for a modern bituminous road. In the stress of war times the penetration type of bituminous macadam, with a refined tar binder, has been successfully adopted. Camp Dix, at Wrightstown, N. J., with its miles of interior roadway and its approaches from the old State road, shows the possibilities of the penetration macadam for rapid construction under war conditions. All winter long the camp roads have resisted the pounding of Uncle Sam's heavy truck units with no appreciable wear or deterioration.

The Jersey problems are but samples. Other communities have them, but seldom have they been so concretely and clearly stated as in the report of General Goethals.

Book Reviews.

Poor's Manual of Industrials for 1918.

Poor's Manual Co., 80 Lafayette Street, New York. Price \$10 a copy. Information revised to April 18. For those interested in Industrial Securities.

This publication contains the latest income accounts and balance-sheets of all industrial companies in which there is a public interest. These are in most cases presented in a comparative form, showing at a glance the growth of the business. This is the first book issued that gives complete information regarding the present income tax on industrial securities. It states whether the companies assume a 4 per cent. tax or only a 2 per cent. tax or no tax at all.

INDUSTRIAL NEWS OF INTEREST

Hammond Heating Contract.

The Hammond Heating Co. of Cincinnati, Ohio, has the contract to furnish and install the Hammond hot-air heating plant in the new Strayhorn Consolidated School, Strayhorn, Miss., which was designed by Raymond B. Spencer, architect, Jackson, Miss.

Leaves Railroad for Commercial Life.

The Certes Supply Co., St. Louis, handling railway, mine and mill supplies, announces the election of Patrick T. Kilgariff as vice-president, with office in the Frisco Bldg. there. Mr. Kilgariff has been with the Southern Railway for a number of years, more recently as chief clerk to T. C. Powell, vice-president at Cincinnati.

Important Machine Shop Sale.

It is announced that the modern and comparatively late type and complete machine-shop equipment of the Eastern Machine &

Iron Co., Lawrence, Mass., will be sold at auction Tuesday, June 4, beginning at 1 P. M. The sale includes equipment for bolt-making, light structural iron work, punch press, machine forgings, blacksmith-shop equipment, electric motors, various machine tools, electric motors, raw material, etc. It will be made in lots to suit purchasers, and it will also include finished product. There are more than 400 lots of equipment, tools, etc., in the sale, which will be conducted by J. E. Conant & Company, auctioneers of Lowell, Mass., for the Newton Trust Co., trustee. A full catalogue may be obtained from the firm.

Westinghouse Annual Report.

The annual report of the Westinghouse Electric & Manufacturing Co. for its year ended March 31, 1918, shows gross earnings, \$95,735,466.75; cost of sales, which includes factory costs and depreciation, general and

Capital and Surplus
\$4,000,000



Total Resources
\$38,000,000

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FINANCIAL NEWS

The MANUFACTURERS RECORD invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

FINANCIAL CORPORATIONS

Ala., Alabama City.—Newman L. Green and others of Alabama City and Gadsden have applied for charter for State bank; capital \$25,000.

Ark., Calera.—Calera National Bank, chartered; capital \$25,000, will begin business July 1, 1918.

July 1, 1918. Organizers: B. A. McKinney and W. L. Mitchell.

Ark., Helena.—Interstate National Bank, succeeding the Interstate Banking & Trust Co., applied for charter, capital \$200,000, surplus \$200,000. E. S. Ready, Pres.; C. R. Fitzgerald and H. P. Anderson, V-Ps.; T. M. Wallis, Cash.

Ark., Heber Springs.—First National Bank (successor to Bank of Heber Springs), chartered, capital \$25,000, surplus \$2500. A. A. Hodges, Pres.; J. R. Baker, V-P.; business began May 13.

Ga., Alpharetta.—Alpharetta Bank applied for charter capital \$25,000. Incorporators: J. O. Peasley, John R. Peasley, Sol Strickland and others.

Ga., Rhine.—Rhine Banking Co. (successor to King & Brown, Bankers) applied for charter, capital \$25,000. W. P. Cobb, Eastman, Ga., temporary pres.; S. J. Brown, Rhine, Cash. Business began May 29.

La., Slidely Island.—Slidely Island State Bank chartered, capital \$15,000; business to begin Sept. 1. W. S. Peck, Pres.; T. J. Chisum, V-P.; I. A. Steel, Chrmn. Loan Board.

Md., Annapolis.—Annapolis Bank, a branch of the Eastern Shore Trust Co., has begun business. W. Meade Holladay, Pres.; Charles F. Lee, V-P.; Dennis J. Thompson, Cash.

Md., Perryville.—National Bank of Perryville is organized, capital \$50,000, surplus \$500. Joseph Condon, Pres.; W. H. Cole, Jr., 1st V-P.; J. T. C. Hopkins, Jr., 2nd V-P., and Geo. H. Coburn, Cash. Business is expected to begin about June 15.

Okla., Enid.—Jaggers, Wallace & Co., capital \$10,000, to deal in stocks. Incorporators: C. O. Jaggers, E. B. Wallace and J. C. Gonzales.

Okla., Oklahoma City.—Industrial Loan & Investment Co. chartered, capital \$200,000, incptd. by O. Wilson, F. E. Anderson and E. Trueblood.

Okla., Oklahoma City.—Liberty Trust Co., chartered, capital \$10,000. Incptrs.: George L. Browning, C. W. Gunter and M. D. Scott.

Okla., Oklahoma City.—Fidelity Finance Corporation chartered, capital \$100,000. Incorporators: R. Copeland, T. M. Wheelless, H. J. Roche.

S. C., Charleston.—Germania Life Insurance Co. of Charleston plans to change name to the Peoples' Life Insurance Co.

S. C., Charleston.—Germania Savings Bank will change name to Atlantic Savings Bank of Charleston.

S. C., Orangeburg.—Royal Palm Investment Co. commissioned; capital \$200,000. Petitioners: William C. Wolfe and W. E. Atkinson.

Tex., Dallas.—Bankers' Exchange chartered, capital \$200. Incorporators: C. H. Harrison, M. J. Hurst and E. H. Emenheiser.

Tex., Mason.—German-American National Bank has changed name to the Mason National Bank.

Tex., McCaulley.—First Guaranty State Bank chartered, capital \$10,000. D. W. Ma-berry, Pres.; L. J. Brian, Cash.

Tex., Port Arthur.—A State bank, capitalized at \$50,000, is being organized by James A. Crates of Houston, Tex.

Tex., Sherman.—Central State Bank chartered, capital \$50,000, will begin business July 6. Incptrs.: Barlow Roberts, Pres.; Sherman; J. D. Lankford, Oklahoma City; J. A. Abernathy, Bonham, and others.

Va., Norfolk.—Bankers' Trust Co., capital \$1,000,000, organized with John D. Abbott, Pres.; J. B. Morgan, 1st V-P.; C. E. Herbert, 2d V-P.; Carl D. Colonna, 3d V-P.; Walter F. Story, Treas.; O. B. Wooldridge, Secy.; James V. Denny, Gen. Counsel.

NEW SECURITIES

Ala., Birmingham.—(Improvement).—City will sell \$200,000 of bonds at \$5.50 premium to Weil-Roth Co., Cincinnati.

Ala., Florence.—(Public Works).—City has authorized issuing bonds for improvement of schools, streets, water plant and sewage system. Election will be held to vote on portion of the issue. Address The Mayor.

Ala., Sheffield.—(School).—City Commrs. sold to a Jackson (Tenn.) banking firm \$50,000 of bonds.

Ark., Ashdown.—(Road).—Little River County sold \$100,000 bonds Road Dist. No. 6 to Judge Jas. Gould, Pine Bluff.

Ark., Little Rock.—(Arkansas Farm Credit).—State of Arkansas has approved the issuing of \$25,000 Arkansas Farm Credit bonds in denominations of \$100, \$500 and

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Fla., Bradentown—(Bridge).—City sold \$15,000 of 6 per cent. 30-year \$500 denomination bonds to the Hanchett Bond Co., Chicago, at par and accrued interest.

Fla., De Land—(School).—Volusia County sold on May 17 to F. C. Hoehler & Co., Toledo, O., at \$12,502.10, and accrued interest \$12,000 of bonds, Special Tax School Dist. No. 11.

Fla., Palmetto—(Bridge).—City sold \$15,000 of bonds to Hanchett Bond Co., Chicago, at par and accrued interest.

Fla., Quincy—City sold \$18,000 of 5 per cent. bonds maturing 1936 to the American National Bank of Pensacola, Fla. J. P. Smith, City Clerk.

Ga., Flovilla—(Water, Light).—City plans to call election to vote on about \$30,000 of bonds. Address The Mayor.

Ga., Jeffersonville—(Water).—City asks bids until 9 A. M. June 1 (sale postponed from May 29) for \$15,000 of 6 per cent. \$500 denomination bonds; dated June 1, 1918; maturity June 1, 1918 to 1943. J. G. Rockmore, Mayor; A. K. Smith, City Clerk.

Ga., Ty Ty—(Public Improvement).—City sold on April 1, at par and interest, \$12,000 of 6 per cent. bonds, dated Jan. 1, 1918, to Bank of Ty Ty.

Ky., Hopkinsville—(School).—City is offering for sale \$14,000 of 5 per cent. 20-year \$100 denomination bonds Pembroke Graded School Dist., Christian County. Address Douglas Graham. (Recently noted.)

Ky., Versailles—(Waterworks).—City asks bids until 8 P. M. June 4 for \$20,000 of 5 per cent. \$1000 denomination bonds, dated April 1, 1918, and maturing 1930 to 1936. Harry C. Taylor, Mayor. Further particulars will be found in the Proposals Department.

La., Cheneyville—(Water, Light).—Cheneyville Village, Rapides Parish, votes June 11 on \$16,000 of 5 per cent. 25-year bonds. M. H. Carnahan, Mayor; Chas. Manning, Clerk.

Md., Hagerstown—(Water).—City sold May 27 to National City Co. of New York and Robert Garrett & Sons of Baltimore, jointly, \$50,000 of 5 per cent. bonds, at \$102.178. Wm. Logan, City Tax Col.

Md., New Castle—(Street).—Report that city is offering for sale \$25,000 of bonds is erroneous.

Miss., Drew—City offers for sale June 4 \$15,000 of 6 per cent. \$1000 denomination bonds. A. D. McFarlane, Mayor.

Miss., Meridian—(Improvement and Indebtedness).—Board of Education has applied for \$75,000 bond issue; \$50,000 to pay present indebtedness and \$25,000 for improvements.

Miss., Meridian—(Road).—Lauderdale County Supvrs., W. R. Pistole, Clerk, postponed date for receiving bids for \$20,000 of 6 per cent. \$500 denomination bonds from June 4 until some time in July. Bonds are dated April 1, 1918 and will mature to 1947, inclusive. (Lately noted.)

Miss., Meridian—(Road).—Four precincts in Bosque County have voted \$40,000 bonds. Address County Commrs.

N. C., Boone—(Road).—Watauga County on May 6 sold \$50,000 of 5-10-year bonds. W. R. Gragg, County Clerk.

N. C., Dobson—(Road).—Franklin Township, Surry County, votes June 15 on \$20,500

of bonds. F. T. Snow, Chrmn. County Commissioners, and S. G. Brim, Clk.

N. C., Dobson—(Bridge).—Commrs., Surry County, F. T. Snow, Chrmn.; S. G. Brim, Clk., will receive bids until noon June 10 for \$100,000 of 6 per cent. bonds, dated May 1, 1918, and maturing 1933 to 1938, inclusive.

N. C., Fremont—(Light, Street).—Town Commrs. offer for sale until 2 P. M. June 27 \$15,000 electric-light and \$10,000 street improvement 6 per cent. 15-year bonds. F. B. Mayo, Mayor, and O. L. Shackelford, Clerk. Further particulars will be found in the Proposals Department.

N. C., Goldsboro—(School).—Goldsboro Township, Wayne County, voted tax to provide for \$25,000 bond issue. Address School Board.

N. C., Greensboro—(School).—City Board of Education, J. Norman Wills, Chrmn., has asked city commrs. to call election to vote on \$75,000 bonds. Nothing definite as yet.

N. C., Oxford—(School).—Granville County Commrs., E. C. Harris, Chrmn., offer for sale until noon June 3 \$5000 of 6 per cent. \$500 denomination bonds Creedmore Public School Dist. Maturity 1928.

Okla., Cleveland—(Paving).—City plans to vote on bonds. Address The Mayor.

Okla., Comanche—(Road).—Comanche County votes June 12 on \$350,000 bonds. Address County Commrs.

Okla., Kingfisher—(Paving).—City plans to vote on \$16,000 bonds. Address The Mayor.

Okla., Morris—(School).—City voted \$60,000 bonds. Address School Board.

Okla., Morris—(Water, Sewer).—City plans to vote on \$50,000 bonds. Address The Mayor.

Okla., Quinton—(Waterworks).—City will open bids in about 15 or 20 days for \$88,000 of 6 per cent. 25-year \$100 denomination bonds. Sam Box, Mayor.

Okla., Vian—(Water).—City is reported to have sold \$10,000 of bonds. F. C. Purcell, City Clerk.

Okla., Woodward—(Light, Water, Sewer).—City sold to John Naveen & Co., Chicago, \$20,000 light, \$7000 water-works and \$5000 sanitary sewer 6 per cent. bonds.

S. C., Abbeville—(School).—Public School Dist. No. 26, Abbeville County, voted \$4000 of 6 per cent. 20-year \$100 denomination bonds. S. M. Beatty is Chrmn. Board of Trustees.

S. C., Bishopville—(School).—Beaverdam School Dist. No. 27, Lee County, will vote June 8 on \$2500 of 6 per cent. 20-year bonds. J. C. Joyner, J. L. Elmore and W. F. Hancock, trustees.

S. C., Fountain Inn—(Water, Sewer).—Town recently voted \$75,000 bonds. F. W. Wellborn, Town Clerk.

Tenn., Memphis—(Terminal).—City sold May 21 to A. B. Leach & Co., New York, \$500,000 of 5 per cent. River terminal bonds at par, accrued interest and \$730 premium.

Tex., Archer City—(Road).—City plans to vote June 15 on \$350,000 bonds. Address The Mayor.

Tex., Archer City (Road).—Archer County votes June 15 on \$200,000 bonds Road Dist. No. 1. Address County Commrs.

Tex., Austin—(Sewage-disposal Plant).—City votes June 18 on \$100,000 of bonds. A. P. Woodbridge, Mayor. (Lately noted.)

Tex., Austin—(Road).—Travis County, D. J. Pickle, Judge, will receive bids 10 A. M. June 8 for \$75,000 of 5 per cent. 2-30-year bonds Defined Road Dist. No. 1, dated April 1, 1918.

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Tex., Ballinger—(Road).—Runnels County, O. L. Parish, Judge, votes June 29 (second election) on \$75,000 of 5½ per cent. \$1000 denomination serial 30-year bonds. (Lately noted).

Tex., Beaumont—(Warrants).—City sold to Blanton Banking Co., Houston, \$69,000 refunding warrants and \$47,000 funding warrants.

Tex., Blythe—(School).—City voted \$10,000 bonds. Address School Board.

Tex., Brady—(School).—Brady Consolidated School Dist., No. 14, McCulloch County, has received approval from the Atty. Genl. of \$6000 of 5 per cent. 40-year bonds. Address School Board.

Tex., Breckenridge—(Road).—Stephens County votes June 15 on \$500,000 bonds. Address County Commrs.

Tex., Brownwood—(Road).—Brown County voted June 15 on \$50,000 bonds. Address County Commrs.

Tex., Brownwood—(Sewer. Water).—City votes June 15 on \$50,000 bonds. Address bonds. Address The Mayor.

Tex., Bryan—(Road).—Brazos County, J. Maloney, County Judge, is receiving bids for \$70,000 of 5½ per cent. bonds.

Tex., Eastland—(Road).—Eastland County, Cyrus B. Frost, County Judge, has for sale the following 5 per cent. \$1000 denomination bonds, dated Jan. 1, 1918, and maturing 1948, with 10-year option: \$130,000 Road Dist. No. 1; \$50,000 Road Dist. No. 2.

Tex., Cleburne—(School).—Districts of Johnson County have voted \$20,000 of 5 per

cent. 20-year bonds and they will be sold as soon as printed and approved. County will probably buy them. G. S. Thomas, County Supt.

Tex., Cresson—(School).—Cresson School Dist., Hood County, voted April 27 to issue \$8000 of 5 per cent. 40-year \$200 denomination bonds. Address S. E. Holmes, Secy., Cresson School Board, Cresson, Tex. (Recently noted under Granbury.)

Tex., Crockett—(Road).—Road Dist. 2, \$50,000, and Road Dist. No. 6, \$20,000, Houston County bonds approved by Atty.-Gen. Address County Commrs.

Tex., Graham—(Road).—Young County votes June 15 on \$350,000 bonds. Address County Commrs.

Tex., Huntsville—(School).—Walker County has approval by Atty. Genl. of \$1500 of 5 per cent. 5-20-year bonds Common School Dist. No. 8.

Tex., Mt. Vernon—(Road).—Franklin County reported to have voted \$45,000 bonds. Address County Commrs.

Tex., Oakville—(Road).—Atty.-Gen. approved \$20,000 of 5 per cent. bonds Live Oak County Road Dist. No. 5. Address County Commrs.

Tex., Orange—(Street, School).—City has for sale \$25,000 street and \$100,000 school 5 per cent. 40-year \$1000 denomination bonds. B. F. Hewson, Mayor.

Tex., Pleasanton—(Waterworks).—City has sold bonds to First National Bank of Pleasanton. Address The Mayor.

Tex., Pittsburg—(School).—Common School

Dist. 3, Camp County, votes June 8 on \$4000 of 5 per cent. 10-20-year \$500 denomination bonds. D. H. Carpenter, County Sheriff.

Tex., Seguin—(Road).—Guadalupe County Commrs. have approval by Atty. Genl. of \$36,000 of 5 per cent. 30-year bonds, recently sold.

Tex., Victoria—(School).—Hood Dist., Victoria County, voted \$9000 of bonds. Geo. M. Crutsinger, County Supt. of Public Instruction. O. W. Johnson, Prest., Hood School Board.

Tex., Wharton—(Road).—El Campo Precinct, Wharton County, votes June 22 on \$30,000 bonds. Address County Commrs.

FINANCIAL NOTES

First National Bank, Amarillo, Tex., increased capital from \$200,000 to \$300,000.

First National Bank of Christiansburg, Va., increased capital from \$35,000 to \$50,000.

Howard Bruce, Prest. of the Bartlett-Hayward Co., Baltimore, has been elected a director of the Federal Reserve Bank of the Fifth Dist., to succeed M. F. H. Gouverneur of North Carolina, resigned. H. B. Wilcox, also of Baltimore, is likewise a member of the board, having been named some time ago.

The North Carolina Bankers' Association at its annual convention in Raleigh last week elected officers for the ensuing year as follows: James A. Gray, Jr. of Winston-Salem, Prest.; Joseph B. Ramsey of Rocky Mount; Erwin Sluder of Asheville, and A. M. Dumay of Washington, N. C., Vice-Prests.; W. A. Hunt of Henderson, Secy.-Treasurer, the latter being elected to that post for the fourteenth year. The executive committee will select the time and place for next year's convention.

FOR SALE

About 10 tons 60-lb. Relaying Rails; one 150 H. P. H. T. Boiler. Few Tanks, Engines, Pumps, etc.

R. W. TRAYLOR,
180 Clinton Ave., Jersey City, N. J.

RAILROAD CONSTRUCTION

RAILWAYS

Ala., Anniston.—Alabama Power Co., James Mitchell, Prest., it is stated, will co-operate for the construction of the proposed railway to Camp McClellan, 6 mi., and that the line is assured. L. L. Crump and others interested.

Mo., Versailles.—Moniteau Railway Co. chartered to build standard gauge line from a connection with Rock Island Railway, just east of Versailles, to coal deposit, 12 mi. Fred C. Kingsbury is Prest.

N. C., Elkin.—Construction on the Elkin & Allegheny Railroad has been suspended until the end of the war, it is announced. Work has been carried to a point within 2 mi. of the summit of the Blue Ridge at Roaring Gap, north of Winston-Salem.

Tenn., Memphis.—Memphis Band Mill Company will build 3 mi. logging railroad on its timber tract near Tirrell, Ark. Jas. P. McSweyn of Memphis is Prest.

Tenn., Sequatchie.—Marion County Coal & Lumber Co plans to build from 6 to 10 mi. railroad in connection with development of coal and timber lands in Marion County. A. N. Walker is Prest., 814 James Bldg., Chattanooga, Tenn.

Tex., Waco.—Missouri, Kansas & Texas Ry. denies press report that it will build a line from Weldon, Tex., to Mart. No such line is contemplated at present.

W. Va., Buckhannon.—Coal & Coke Railway, it is announced, has completed short cutoff between Adrian and Buckhannon to connect with the Baltimore & Ohio Railroad for interchange of traffic.

W. Va., Seth.—Chesapeake & Ohio Railway has completed extension from Seth to Whitesville, 3.6 mi., and will soon operate. Boxley Bros. Co., Orange, Va., contractor, who also has contract on extension Whitesville up Big Elk Creek, 3.5 mi.

GIN OUTFIT

FOR SALE OR EXCHANGE

Eight 70-saw Murray's All Steel Gins; two Steam Revolving Presses; two 50 H. P. H. S. G. Engines; one 150 H. P. H. S. G. Boiler. Good condition and ready for operation. **FARMERS' GIN & MILL CO.** Waverly, Ala.

FOR SALE REBUILT MACHINERY

- 1-16x32x42 Cross-Compound Murray Rolling Mill Corliss Engine, belt drive.
- 1-500 H. P. Cross-Compound Fitchburg, belted engine.
- 1-400' Worthington Surface Condenser.
- 1-66"x16" Tubular Boiler.
- 1-16x36 Double Eccentric Heavy-Duty Fulton Corliss Engine, belt drive.
- 1-14x20 Atlas Automatic Engine, belt drive.
- 1-250 H. P. Vertical Closed Baragwanath Heater, with brass tubes.
- 1-40x60 No. 10 gauge Steel Stack.
- 1-36x70 No. 10 gauge Steel Stack.
- 1-4x5 Vertical Throttling Engine.
- 1-Induced Draft Fan, 60" diameter, 30" outlet.
- 1-20x34x28 Tandem Compound Fitchburg Engine, direct connected to 300 K. W. direct-current G. E. generator.

H. J. GEBHARDT

1420 Fisher Building

CHICAGO

NEW ORLEANS

¶ *A New Era is dawning for NEW ORLEANS.*

¶ *A great INDUSTRIAL CANAL is to be built immediately, connecting the Mississippi River and the Sea.*

¶ *NEW ORLEANS is to become a Free Port, thus increasing greatly the shipping to and from this Port.*

¶ *Many new enterprises are coming to NEW ORLEANS while others are expanding.*

¶ *We have the choicest locations for Industrial and Commercial Property in and approximate to NEW ORLEANS.*

J. L. ONORATO

Real Estate

820 Common St.

New Orleans.

Westinghouse Electric & Manufacturing Company

And Its Proprietary Companies in the United States

(Except New England Westinghouse Company)

Consolidated and Condensed General Balance Sheet, March 31, 1918

ASSETS	
PROPERTY AND PLANT.....	\$41,167,874 49
SINKING FUND.....	34,177 23
INVESTMENTS.....	19,212,071 51
CASH.....	8,918,555 64
CASH on deposit for redemption of Debentures, Bonds, Notes and for Interest and Dividends.....	92,255 65
NOTES RECEIVABLE AND ACCOUNTS RECEIVABLE.....	29,150,835 56
WORKING AND TRADING ASSETS.....	60,548,532 69
OTHER ASSETS.....	5,590,975 47
Total.....	\$164,714,378 24
LIABILITIES.	
CAPITAL STOCK:	
Preferred.....	\$3,998,700 00
Common.....	70,813,950 00
Total Capital Stock.....	\$74,812,650 00
FUNDED DEBT (Westinghouse Machine Co. Issues).....	6,396,000 00
FIFTEEN YEAR FIVE PER CENT. NOTES—Issue of 1909—Due January 1, 1924.....	52,500 00
ONE YEAR NOTES—Due February 1, 1919.....	15,000,000 00
REAL ESTATE PURCHASE MONEY MORTGAGES.....	175,000 00
NOTES PAYABLE—Current Bank Loans.....	12,700,000 00
Subscriptions to Liberty Loan Bonds.....	2,433,551 00
ACCOUNTS PAYABLE.....	8,016,998 38
INTEREST, TAXES, ROYALTIES, ETC., ACCRUED, NOT DUE.....	3,142,205 75
ACCRUED DIVIDENDS.....	1,309,221 38
ADVANCE PAYMENTS ON CONTRACTS.....	10,624,925 67
UNPAID DEBTURE CERTIFICATES, BONDS, NOTES AND INTEREST AND DIVIDENDS.....	92,255 65
RESERVE.....	3,555,275 68
PROFIT AND LOSS—SURPLUS.....	26,404,694 73
Total.....	\$164,714,378 24

Consolidated and Condensed Statement of Income and Profit and Loss for the Year Ended March 31, 1918
(Except New England Westinghouse Company)

Income Account for the Year:		Statement of Profit and Loss Account:	
Sales Billed.....	\$95,735,406 75	Profit and Loss Surplus, March 31, 1917.....	\$18,105,298 66
Cost of Sales.....	80,225,936 91	Net Income for the Year.....	15,405,680 89
Net Manufacturing Profit.....	\$15,509,469 84	Gross Surplus.....	\$33,510,979 55
Other Income.....	1,325,263 52	Preferred Dividends.....	\$299,902 50
Gross Income from All Sources.....	\$16,834,733 36	Common Dividends.....	5,310,945 61
Deductions from Income—Interest Charges.....	1,429,052 47	Appropriation to Reserve Accounts.....	1,300,036 19
Net Income Available for Dividends and Other Purposes.....	\$15,405,680 89	Miscellaneous (Net).....	135,400 52
		Surplus March 31, 1918, per Balance Sheet.....	\$26,404,694 73

PROPOSALS

BOND ISSUES

BUILDINGS

PAVING

GOOD ROADS

More Southern Proposal Advertising Is Printed In The Manufacturers Record Than In Any Other Paper

Bids close June 14, 1918.

PROPOSALS FOR MOTORS, GENERATORS, Pumps, Radiators, Meat Choppers, Motor-driven Pumps, Die Blanks, Foundry Nails, Shovels, Bronze, Firebrick, Silica Sand and Wash, Coal Tar, Coal-tar Pitch, Horse Hair, Motor-truck and Bicycle Tires, Leather, Canvas and Leather Belting, Manila Rope, Uniform and Denim Cloth, Toweling, Rubber Erasers, Paper and Cypress Lumber. Sealed proposals will be received at the office of the General Purchasing Officer, The Panama Canal, Washington, D. C., until 10:30 o'clock A. M. June 14, 1918, at which time they will be opened in public, for furnishing the above-mentioned articles. Blanks and information relating to this circular (1219) may be obtained from this office or the offices of the assistant purchasing agents, 24 State Street, New York City; 606 Common Street, New Orleans, La., and Fort Mason, San Francisco, Cal.; also from the United States Engineer offices in the principal cities throughout the United States. A. L. FLINT, General Purchasing Officer.

Bids close June 12, 1918.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., May 15, 1918. Sealed proposals will be opened in this office at 3 P. M. June 12, 1918, for remodeling toilet-room, repairs, plumbing, heating, etc., in the United States courthouse, postoffice, etc., at Clarksburg, W. Va., in accordance with drawings and specifications, copies of which may be had at this office or at the office of the custodian, Clarksburg, W. Va., in the discretion of the Supervising Architect, JAMES A. WETMORE, Acting Supervising Architect.

Bids close June 10, 1918.

TREASURY DEPARTMENT, Supervising Architect's Office, Washington, D. C., May 15, 1918. Sealed proposals will be opened in this office at 3 P. M. June 10, 1918, for the mechanical equipment (except lighting fixtures) of the United States Immigration Station, Boston, Mass., in accordance with drawings and specifications, copies of which may be obtained from the Supervising Chief Engineer, Room No. 137, Postoffice Building, Boston, Mass., or at this office, in the discretion of the Supervising Architect, JAS. A. WETMORE, Acting Supervising Architect.

Bids close June 27, 1918.

\$25,000 6% Bonds

The Board of Town Commissioners of the Town of Fremont, N. C., proposes to sell \$15,000 worth of Electric Light Bonds and \$10,000 worth of Street Improvement Bonds at the Town Hall in Fremont, N. C., on the 27th day of June, 1918, at 2 P. M.

The said Board will receive bids on 6 per cent. bonds, said bonds to be coupon bonds and are to run for fifteen years from the date thereof.

Said Board reserves the right to reject any and all bids. All bids must be accompanied by a certified check of 2 per cent. of the amount bid on.

F. B. MAYO, Mayor.
O. L. SHACKELFORD, Clerk.

Bids close June 18, 1918.

\$35,000 6% Bonds

Notice is hereby given that the City Council of the City of Fort Lauderdale, Florida, will, until 7:30 P. M. of the eighteenth day of June, A. D. 1918, receive at the office of the City Clerk of the City of Fort Lauderdale, Florida, sealed bids for the purchase of Thirty-five Thousand (\$35,000) Dollars of the bonds of said City of Fort Lauderdale, Florida.

The bonds hereby offered for sale are issued for park purposes and for the purpose of acquiring and improving a golf course for said City of Fort Lauderdale, and bear interest at the rate of six (6%) per centum per annum, payable semi-annually on the first days of May and November of each year, principal and interest being payable at the Chase National Bank in the City of New York, State of New York.

Said bonds are dated May 1, 1918; are issued in denominations of One Thousand Dollars each; are numbered from "1" to "35," both inclusive, and become due and payable twenty (20) years after date.

The successful bidder will be required to receive and pay for said bonds within thirty (30) days after the date of the acceptance of the bid, and no bid will be considered which does not contain a stipulation to this effect.

Each bid shall be accompanied by a certified check on a responsible banking house, payable to the Treasurer of Fort Lauderdale, Florida, in a sum equal to fifteen (15%) per centum of the amount of the bid as an evidence of good faith and as security for the bidder's complying with his bid, which certified check shall be forfeited as liquidated damages for the costs and expenses occasioned by a failure to comply with the bid in accordance with the terms thereof.

All checks shall be promptly returned to unsuccessful bidders.

The Council reserves the right to reject any and all bids.

By order of the Council.
GEO. W. HALL,
City Clerk.

May 17, 1918.

Bids close June 4, 1918.

\$20,000 5% Bonds

Sealed bids will be received at the Council Chamber in the City of Versailles, Ky., until 8 o'clock P. M. June 4, 1918, for all or any number of twenty water-work bonds, \$1000 denomination, and dated April 1, 1918, bearing 5 per cent. interest, payable semi-annually. Bonds serially numbered 1 to 20 will mature as follows: 1 and 2 in 1920; 3, 4 and 5 in 1921; 6, 7 and 8 in 1922; 9, 10 and 11 in 1923; 12, 13 and 14 in 1924; 15, 16 and 17 in 1925; 18, 19 and 20 in 1926. No bid for less than par value and accrued interest from April 1, 1918. Certified check for 2 per cent. of total offer must accompany each bid. Right reserved to reject any or all bids. For information in detail apply to

HARRY C. TAYLOR,
Mayor of Versailles, Ky.

Bids close June 6, 1918.

Water-Works and Sewers

Fountain Inn, S. C.

Bids are invited on the furnishing of all materials and constructing a water-works system and a system of sanitary sewers for the Town of Fountain Inn, S. C., under recently authorized bond issue of \$75,000.

Bidders will be required to file with their bids a certified check in the sum of \$500 as a guarantee that contract will be entered upon and bond executed promptly after the award. Contractor to whom award may be made will be required to file an indemnity bond in the sum of \$20,000, drawn by some satisfactory guaranty company to safeguard the satisfactory completion of the contract.

Plans and specifications may be had from F. W. Welborn, Town Clerk of Fountain Inn, S. C., by making a deposit of \$10, which will become a forfeit to the Town of Fountain Inn unless said plans and specifications are returned in good condition.

Bids will be received until noon June 6, 1918.

The Board of Public Works reserves the right to reject any or all bids.

D. M. GARRETT,
Chairman Board of Public Works.
F. W. WELBORN,
Town Clerk, Fountain Inn, S. C.
J. N. AMBLER,
Consulting Engineer, Winston-Salem, N. C.

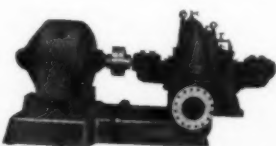
HAVE YOU OUR CATALOG?

Before you order centrifugal pumping equipment for any purpose, write for our catalog of Lea-Courtenay Pumping Equipment. It tells you all the advantages—the efficiency, economy, reliability and durability—and the chief reasons for these advantages. It also tells you why many expert engineers insist on Lea-Courtenay equipment and where it has been installed.

Here's the point—if you are going to buy in the near future, get the Lea-Courtenay catalog first.

LEA-COURTENAY CO.

7 Maine St., Newark, N. J.



Bids close June 11, 1918.

Equipment of the South Mississippi Charity Hospital

LAUREL, MISSISSIPPI.

Sealed proposals, addressed to Hon. J. E. Davis, Secy., will be received by the Board of Trustees of the South Mississippi Charity Hospital until 12 noon Tuesday, June 11, 1918, at the Pinehurst Hotel, Laurel, Miss., for the Furniture, Bedding, Laundry and all equipment of said hospital.

Plans and specifications are on file with Dr. J. E. Donald, Superintendent, Hattiesburg, Miss., and at office of Xavier A. Kramer, Architect and Consulting Engineer, Magnolia, Mississippi.

The right to reject any or all bids is reserved.

Done by order of the Board of Trustees.
J. E. DAVIS, Secretary,
Hattiesburg, Miss.

XAVIER A. KRAMER,
Architect and Consulting Engineer,
Magnolia, Mississippi.

Bids close June 3, 1918.

Bridge Construction

The Board of County Commissioners of Lenoir County, North Carolina, invite proposals for the erection and completion of a steel bridge over Bear Creek, Lenoir County, near the Town of La Grange, N. C. Said bridge is to be about 75 feet in length and 16 feet roadway, with concrete abutments. Bids to be opened Monday, June 3, 1918. For further particulars see or write D. W. WOOD, La Grange, N. C. No plans on file.

C. W. PRIDGEN,
Clerk to Board.

Packing Plant

Contract for the State Packing Company, Raleigh, N. C., will be let in the next thirty days. Any contractors wishing to bid on the construction, get in touch with C. L. Brooks Engineering Co., Moultrie, Ga.

Bids close June 20, 1918.

Road Construction

Sealed proposals will be received by the Commissioners of Road Improvement District No. 1 of Conway County, Arkansas, at the office of the State Highway Commission, State Capitol, Little Rock, Ark., until 1 P. M. Thursday, June 20, 1918, for furnishing material and constructing approximately 3 1/2 miles of graded road within said district.

Approximate quantities:
150,000 cubic yards grading.
250 cubic yards plain concrete.
500 cubic yards reinforced concrete.
260 linear feet steel bridge.
3,300 linear feet pipe culvert.

Each proposal must be accompanied by a certified check or a bidder's bond, executed by some surety company authorized to do business in Arkansas, for \$300 if for the entire contract, or for not less than 2 per cent. of the amount of the bid if for less than the entire contract.

Bond will be required from the successful bidder in sum equal to approximately 40 per cent. of the amount of the contract.

Plans and specifications are on file with the County Clerk, Morrilton, Arkansas; State Highway Commission, State Capitol, Little Rock, Arkansas; Parkes Engineering Company, Pine Bluff, Arkansas.

Prospective bidders may examine them at any of these places, or may obtain a copy for their own use from the engineers upon payment of \$10, one-half of which amount will be refunded to those who submit a bona fide bid. For any other information apply to the engineers for the district, Parkes Engineering Co., Citizens' Bank Building, Pine Bluff, Arkansas.

A. C. STOVER,
C. E. CRUCE,
S. L. HEALY,

Commissioners Road Improvement District No. 1 of Conway County, Ark.

IF YOU WANT

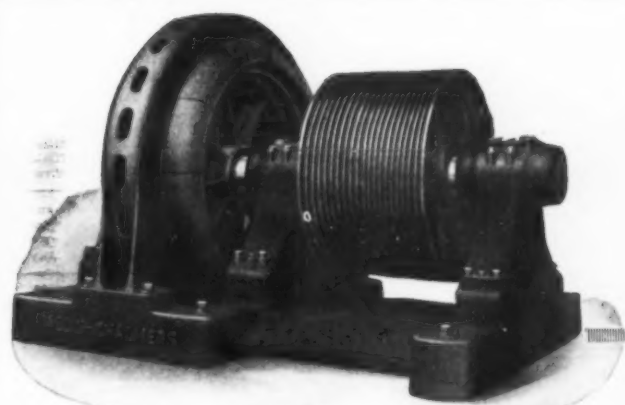
To get in touch with some Extra Contract Work

ADVERTISE IN THE
Southern Shops Seeking Contract Work
Department

RATES ON APPLICATION.

Manufacturers Record Baltimore, Md

Allis-Chalmers



INDUCTION MOTORS

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Because of their rugged construction and ability to meet emergency conditions, Allis-Chalmers Motors are specified by discriminating purchasers.



Allis-Chalmers Manufacturing Company

COMPLETE POWER AND ELECTRICAL EQUIPMENT

MILWAUKEE,

Offices in All Principal Cities

WISCONSIN

Classified Opportunities

MINERAL AND TIMBER LANDS WATER POWERS MISCELLANEOUS PROPERTIES

THE BEST MINERAL LANDS in Georgia. Pyrites, feldspar, manganese and other minerals; money makers. Write about them. W. J. Norris, 513 Empire Bldg., Atlanta, Ga.

FOR SALE—A desirable water-power site, directly on railroad. No cash required for purchase of site. Suitable for flour mill or factory. No flour mill in vicinity. Address Lock Box No. 516, Hagerstown, Md.

FOR GOOD VALUES in Virginia blue grass or general purpose farms, coal and timber lands, and Roanoke City and suburban property, factory sites particularly, address Ellis L. Wright, 313 South Jefferson Street, Roanoke, Va.

IRON ORE LANDS

FIRST-CLASS IRON ORE properties in Southwest Virginia for sale; accessible, well prospected; maps and analyses by reliable mining engineers. W. W. Taylor, Lynchburg, Va.

OIL LAND

1300 ACRES Texas oil lands for sale; lays 28 miles northwest of Houston, Texas, on T. & B. V. Ry. Good soil, level and covered with timber. Wood selling at Houston \$5 to \$9 cord. Farms selling high as \$60 acre near this. Looking good for oil. All tests have been very satisfactory. Price \$15 acre. Terms on half. Write Box 902, Tulsa, Ok.

PHOSPHATE ROCK

FOR SALE—Two million tons of blue rock phosphate in the ground near Mt. Pleasant, Tenn., running from 58 to 72 per cent. Bone phosphate of lime; spur of the L. & N. R. runs through it; locating the Government nitrate plant at Muscle Shoals, Ala., makes the property more valuable; Muscle Shoals is only 60 miles from Mt. Pleasant. Major W. N. Hughes, U. S. A., 523½ Broadway, Nashville, Tenn.

MANGANESE ORE LANDS WANTED

IF YOU have high-grade manganese ore in the Southern Appalachian section, and are willing to let the operator make part of the money, write full particulars to No. 5074, care Manufacturers Record, Balto., Md.

MANGANESE ORE LANDS

550 ACRES MANGANESE LAND in Virginia; adjoins a producing mine; convenient to railroad. Will sell outright or will lease for term of years. W. E. Ferguson, 220 St. Paul St., Baltimore, Md.

700 ACRES MANGANESE ORE LANDS for sale; engineer's estimate, 800,000 tons; railroad one mile; now mining with pick and shovel; analysis and records available. Address Donk Aydelott, Tullahoma, Tenn.

MANGANESE — extensive leases large quantity 45% ore blocked out. Southern R. R. 2 mi.; easy terms; quick returns. W. E. Hamilton, Columbus, O.

COAL LANDS AND MINES

HOW TO SUPPLY COAL FOR YOUR FACTORY? OWN A COAL MINE. I can sell you a going operation, 1400 acres, fully equipped; capacity 500 tons daily. No. 1 steam. Also have smaller and larger operations for sale. E. W. Speed, Suite 412-413 First National Bank Bldg., Roanoke, Va.

1600 ACRES of No. 8 coal lands, located on Ohio River, at Glarington, O. Coal undeveloped, but arrangements being made for openings near property. Property can be bought at bargain now. Will sell all or part upon terms. Write Harry S. Brady, 680 Rockefeller Bldg., Cleveland, O.

FOR SALE—2500 acres cheap mined coal land; adjacent railroad; recent oil tests uncovered three additional seams below, also enormous gassters too drift seam; convenient tipples built down to railroad. For particulars address Cavanagh, McAlester, Okla.

FOR SALE—Goling Coal Mines in Ohio and Virginia; Coal Lands in Kentucky, West Virginia and Alabama. H. C. Van Aken, 309 Post Bldg., Battle Creek, Mich.

COAL MINE FOR SALE, with electrical equipment and 24,000 acres of good coal land, on which is much valuable timber and two mills; near the Southern Railway, in Alabama, 66 miles westerly from Chattanooga, Tenn. Bon Air seam, 40 inches thick, of high grade for domestic use or as steam coal; good markets and reasonable freight rates covering a large territory. For sale cheap to close an estate. For full particulars address F. D. Pierce, Bridgeport, Ala.

FOR SALE—20,000 acres coal rights. Southern Illinois field; 7 to 9-foot vein. Best coal. Rail facilities. \$40 per acre. Address No. 5166, care of Manufacturers Record, Balto.

COAL AND TIMBER LAND

50,000 ACRES Tennessee coal and timber lands, located in Lincoln, Franklin and Coffee counties; must sell to settle partnership. Price \$2.50 per acre; \$15,000 cash, balance on ten equal annual payments. Would accept exchange property to the amount of one-half. T. N. Figuers, Jr., Columbia, Tenn.

RATES AND CONDITIONS

Rate 25 cents per line per insertion. Minimum space accepted, four lines. In estimating the cost, allow seven words of ordinary length to a line. When the advertisement contains a number of long words, proper allowance should be made. Terms: Invariably cash with order; check, postoffice or express order or stamps accepted. No display type used. Questionable or undesirable advertisements will not be accepted. The assistance of our readers in excluding undesirable advertisements is requested. We reserve the right to refuse any advertisement. No patent medicine, whiskey or mining stock advertisements accepted. Rate for special contracts covering space used as desired within one year as follows: 100 lines, 23c. per line; 300 lines, 21c. per line; 500 lines or more, 20c. per line.

TIMBER LAND WANTED

RESPONSIBLE timber man wants to have the exclusive sale of three good-size Southern timber tracts. Owners only. Address No. 5094, care Manufacturers Record, Balto., Md.

TIMBER LAND

HARDWOOD TIMBER LANDS. — 19,447 acres river-bottom land in Louisiana; one contiguous tract; splendid variety of timber; estimated 122,000,000 ft.; no better cotton land if cleared; railroad station on property, and 1½ miles of Mississippi River. Price, \$17.50 per acre. Leslie P. Pool, Hopkinsville, Ky.

I HAVE the best V. L. L. pine timber tracts in the South, Georgia and Florida, large and small. Price right. W. J. Norris, 513 Empire Bldg., Atlanta, Ga.

TIMBER

15,000,000 FEET VIRGIN TIMBER in Caroline County, Va. As fine as grows. Will cut anything. Two-thirds hardwood, mostly white oak, hickory and poplar, balance yellow pine. Good level logging land. Price \$80,000.

50,000,000 feet short-leaf pine, Eastern North Carolina. Price \$200,000. Up-to-date band mill in Eastern North Carolina; 60,000,000 feet standing timber behind it. Making good money. Price and terms on application. Green & Redd, Ninth and Franklin Sts., Richmond, Va.

FOR SALE—Fifty million feet of fine South Carolina timber, consisting of thirty-nine million feet red gum, five million oak, three million cypress, three million short-leaf pine. This timber is very large and of fine quality; easily logged at any time of the year. Price reasonable. Accessible to railroads. Will bear closest investigation. Address No. 5033, care Manufacturers Record.

APPROXIMATELY 30,000,000 feet long leaf, short leaf and rosemary pine timber, with scattering hardwoods and cypress, in Berkeley County, South Carolina. Will deal only with prospective purchaser direct. Terms to responsible parties. Address Owner, Box No. 14, Eutawville, S. C.

FOR SALE—We specialize in Southern hardwood timber, and have tracts ranging from 500 to 50,000 acres. We have most experienced man in the South today in charge of our timber department. Southern Realty Company, Vicksburg, Miss.

OVER 700,000 pine trees, on floating stream; 5 cents per tree 12 inches up; ¼ cash on joint estimate; balance, as cut. Address Smith, 542 Audubon Bldg., New Orleans.

FARM AND TIMBER LANDS

GRAPEFRUIT GROVE IN MIAMI, FLORIDA, adjacent to city limits, and within ¼ mile of \$25,000 school. Contains nearly 1400 bearing grapefruit trees, 287 orange, a few tangerine, lime, lemon, mangoes, and 54 avocado trees. This grove has earned as much as \$8000 per year, and I can offer it for sale at \$17,000 to close an estate. It contains nearly 22 acres, and is within 15 minutes ride of the heart of Miami.

22,400 acres Timber Land, \$4 per acre, located within six miles of junction point of 5 railroads, and estimated to cut 42,000,000 feet of long-leaf yellow pine and 8,000,000 feet of cypress and other hardwoods. This tract has never been turpentine and is one of very few bargains of its kind available. Titles are guaranteed to be perfect, and very liberal terms if desired.

400,000 acres Timber and Prairie Land, \$6 per acre. This tract has never been cruised, and contains some very valuable pine and cypress timber, as well as some rich prairie lands. I can offer this in tracts of 5000 acres or more at \$7 an acre, or the entire tract at \$6 per acre.

Write me if you are interested in Florida lands of any description. My fifteen years in the real estate business in Florida enables me to render a valuable service. William L. Phillips, 151 Twelfth street, Miami, Florida. Reference: Bank of Bay Biscayne, Miami, Fla.; Miami Chamber of Commerce.

FOR SALE—14,000 acres virgin hardwood timber and land, one mile east of Kennett, Mo. One solid block of best agricultural land in Missouri. Norman's Land & Mfg. Co., Hunterville, Mo.

FARM AND TIMBER LANDS

FOR SALE—HAMMOCK AND PINE LAND, improved and unimproved, located on the Withlacoochee River, near Gulf of Mexico, in Levy County. Fishing, hunting, good school, free hog and cattle range, hard roads. Can give testimonial of prosperous farmers and stock raisers. For particulars write Box No. 8, Inglis, Fla.

WE OWN LARGE TRACTS OF TIMBER LANDS, cut-over lands and colonizing lands. If interested, address H. H. Wefel, Jr., & Co., Mobile, Alabama.

SUBDIVISION PROPERTY

FOR SALE—28 acres Woodlawn subdivision West Point, Miss. This land lays high and is covered with forest trees. Is the only desirable building subdivision near the business center of the city. Big demand for homes now on account of the aviation field. Fine investment for party with sufficient capital to develop. John Brand, Owner, West Point, Miss.

FRUIT, FARM AND TRUCK LANDS

THESE COLUMNS ARE CLOSELY READ BY PEOPLE for information of all kinds about Southern properties of every description. If you have a property of any kind that you want to dispose of, try an advertisement in these columns. Others have to their advantage. For rates see head of department.

ALABAMA

FOR SALE—Southern black land hay farm, consisting of 198 acres, seven miles out of Montgomery, Ala., on gravelled road. Wire fence all around place. Nice six-room bungalow with bath, water-works, etc., facing the road. Price only \$80 acre, including dwelling. One hundred twenty acres fine cotton and corn land, just four miles north of Montgomery on gravelled road. Price \$75 acre.

Two hundred and fifty acres, located six miles west of Montgomery, Ala., and known as creek lands; suitable for cotton, corn, etc. Price \$40 acre.

We will be glad to give further details on request. Duskin & Stewart Realty Co., 6½ Dexter Avenue, Montgomery, Ala.

FOR SALE—Eight thousand acres of choice cut-over farm land. Located on L. & N. Railway, near beautiful growing town of three thousand inhabitants. Price \$8 an acre, with \$2500 cash and balance on attractive terms. Tutwiler & Sheehan, Dothan, Ala.

FLORIDA

A BEAUTIFUL WINTER HOME, a profitable orange and grapefruit grove, a general farm, cattle, hog or poultry ranch, on the famous Indian River section, Vero, Florida. The wonderful climate permits not only agricultural operations all the year, but all enjoyable, life-prolonging outdoor sports. Investigate now this wonderfully charming section Indian River Farms Company, First National Bank Building, Vero, Florida.

FOR SALE—3000 acres farming land, in healthy warm climate; good, hard roads, hog and cattle range, some improved lands, fruit, vegetable, general farming. Fishing and hunting. Transportation by water and rail. Box No. 8, Inglis, Fla.

9000 ACRES citrus, cattle, colonization land. Cattle never fed from calf to butcher, \$5.50 per acre; 1080 acres timber, truck land, \$6. Sadler, Fort Myers, Fla.

LOUISIANA

No. 583—1575 ACRES—Less than two miles from a good railroad town, on public road, in the bend of and having about three-mile frontage on Tensas River. More than one-half of it open and in cultivation. The soil is all a black loam and black sandy loam; no thin land on the place, and no stiff land. Practically all of it can be put in cultivation; plenty of tenant-houses. A lot of the land made more than a bale of cotton and 75 bushels of corn per acre last year. After a critical inspection we do not hesitate to recommend this as one of the very best properties in that entire section. We cannot give possession until December 1, but will accept a small payment to hold it and bind the trade. We have a close price on it for cash, or will trade for good unincumbered income city property, without a cash payment other than this. Delta Land Co., Realtors, 501-2-3 Exchange Bldg., Memphis, Tenn.

MISSISSIPPI

FOR SALE—320 acres, half mile of R. R. station in heart of prairies, fine alfalfa land, fine clover, well improved, at \$65 per acre; good trees, 500 acres on rock road, 7 miles off West Point, near good school; ever-flowing well; half of land black; balance, clay loam. A bargain at \$40 per acre. W. F. LAGRONE, West Point, Miss.

SOUTH CAROLINA

625 ACRES fertile, self-drained land; 135 acres cleared. Near railroad, church and school. \$6.50 per acre. G. W. Harrelson, Andrews, S. C.

TENNESSEE

FOR SALE—700 acres level land near Nashville; 1½ miles junction; 20 trains daily; railroad through place; can have switch. Two dwellings, two barns, water; 100 cultivation; fine orchard; 600 acres timber; 10,000 cords wood; \$25 per acre, one-fourth cash, balance terms. Bonner, 712 Settle Place, Nashville, Tenn.

VIRGINIA

GAYMONT—Beautiful country place, situated one mile from Staunton, Virginia, on National Highway, containing 197 acres of fine land and original forest. Large colonial house and outbuildings in good repair. Spacious cottage near main house. The portion containing improvements, with seventy-one (71) acres, can be bought for \$25,000, or the entire place for \$40,000. Address Mrs. R. H. Catlett, Staunton, Virginia.

VIRGINIA—50 to 75 acres water-front property, on Belt Line and Virginian railroads; 1 mile from Norfolk Navy Yard; 1 mile from city; on trolley line and boulevard. Address R. A. Woods, Room 302, 3 Southern Produce Bldg., Norfolk, Va.

BUSINESS OPPORTUNITIES

WONDERFUL DEVICE. PUNCTURELESS AUTOMOBILE TIRE. Substituting compression of an elastic body throughout and against the periphery of the tire for compressed air. It is a mechanical equivalent to a pneumatic tire in appearance and action, except punctures are impossible. The United States and Canadian patents are for sale. Address inquiries to R. A. Lange, 406 Market Street, St. Louis, Mo.

CHEMICAL LABORATORY.

We are offering for sale the chemical laboratory of the late Frank P. Drane of the city of Charlotte, North Carolina. This laboratory is well equipped for assaying and for testing of cements and asphalt, as well as for general chemical research. A complete list of the inventory will be mailed to interested parties.

AMERICAN TRUST COMPANY, Administrator of Frank P. Drane, deceased, Charlotte, N. C.

EXCHANGE. — Unbroken block 680 restricted lots in New York City. 18 minutes' running time to heart of city. Unexcelled trolley connections. Few blocks from P. R. R. station. Building development going on. Builders pay \$750 to \$3500 per lot. Will consider Liberty bonds, municipal, industrial or other marketable securities for part or whole. J. P. Williams, Allentown, Pa.

\$50,000 LOAN. Wanted to borrow fifty thousand dollars (\$50,000), ten per cent. Payable ten thousand dollars (\$10,000) a year, beginning 1919, with the provision that may pay back entire amount in three years. Going business in Florida at least two hundred fifty thousand dollars (\$250,000) security. Address quick No. 5110, care Manufacturers Record, Balto.

BRICK MEN—By little plant remodeling you can manufacture high-grade fuel bricks from garbage and waste. More profitable than brick, which is now curtailed. Write Culver, Pacific Building, Washington, D. C., for details.

BEFORE venturing upon any new enterprise be sure to consult a recognized business counselor; you may save much money and disappointment; complete analysis made of propositions; reasonable fee. "M," Box 36, Station F, New York.

WILL PURCHASE electric light and water-works properties having established earnings and located in substantial growing communities. Give particulars concerning present annual gross earnings and franchise conditions. Address Treasurer, P. O. Box 1136, Providence, R. I.

WANTED—Good tract of poplar timber (preferably in North Carolina); can use some oak. Want to exchange money-making hardware business and brick store building in one of the best towns in Southwest Virginia. Address No. 6000, care Manufacturers Record.

MANUFACTURERS AND FARMERS ARE BUYING HEAVY OF LIBERTY BONDS. There must be a reason. They are assured financial success in a section of Middle Tennessee where all conditions are favorable. Write for catalogue exploiting unusual opportunities to Board of Trade, Columbia, Tenn.

WANTED—Foundry and machine shop at good location. Must be established and ready to operate. Address No. 5112 care Manufacturers Record, Baltimore, Md.

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